DUKANE

LCD Projector

Model 8776-W

USER'S MANUAL

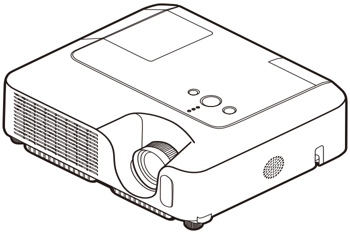
Includes: Technical Information & Networking Operation

401-8776-W-00

Projector

8776-W

User's Manual – Operating Guide



Thank you for purchasing this projector.

⚠WARNING ►Before using this product, please read the "User's Manual - Safety Guide" and related manuals to ensure the proper use of this product. After reading them, store them in a safe place for future reference.

About this manual

Various symbols are used in this manual. The meanings of these symbols are described below.

⚠WARNING	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
⚠CAUTION	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

📖 Please refer to the pages written following this symbol.

NOTE • The information in this manual is subject to change without notice.
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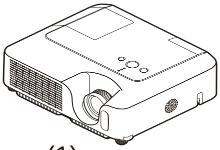
Content

About this manual. 1
Content 2
Contents of package 3
How to use the Slot cover lock 3
Projector features. 4
Preparations 4
Fastening the lens cover 4
Part names 5
Projector 5
Control buttons 7
Remote control 7
Setting up 8
Arrangement 9
Adjusting the projector's elevator . .10
Using the Security Bar. 11
Connecting your devices 12
Connecting power supply 15
Inserting an SD Card and USB Memory . .16
Remote control 17
Putting batteries 17
Using the remote control 18
Power on/off 19
Turning on the power. 19
Turning off the power. 19
Operating 20
Adjusting the volume 20
Temporarily muting the sound 20
Selecting an input signal 20
Searching an input signal 21
Selecting an aspect ratio 21
Adjusting the zoom and focus 21
Using the automatic adjustment feature . .22
Adjusting the position 22
Correcting the keystone distortions .23
Using the magnify feature 23
Freezing the screen. 24
Temporarily blanking the screen . . .24
Operating the computer screen. . . .25
Multifunctional settings 26
Using the menu function 26
EASY Menu 27
Aspect, Auto keystone Execute, Keystone, Picture mode, Brightness, Contrast, Color, Tint, Sharpness, Whisper, Mirror, Reset, Filter time, Language, Go to advanced menu
PICTURE Menu. 29
Brightness, Contrast, Gamma, Color temp, Color, Tint, Sharpness, My memory
IMAGE Menu. 32
Aspect, Over scan, V. position, H. position, H. phase, H. size, Auto adjust execute
INPUT Menu 34
Progressive, Video NR, Color space, Component, Video format, Frame lock, RGB in, Resolution
SETUP Menu. 37
Auto keystone Execute, Keystone, Whisper, Mirror, Volume, Audio
SCREEN Menu 39
Language, Menu position, Blank, Start up, MyScreen, MyScreen lock, Message, Source name
OPTION Menu. 42
Auto search, Auto keystone, Auto on, Auto off, Lamp time, Filter time, My button, Service, Security
MIU Menu .52
Live Mode, PC-LESS Presentation, Setup, e-SHOT, Information, Service
Maintenance 57
Lamp 57
Air filter 59
Replacing Internal Clock battery . . .61
Other care .62
Troubleshooting 63
Related messages. 63
Regarding the indicator lamps. 64
Phenomena that may be easy to be mistaken for machine defects 66
Warranty and after-service. . . 69
Specifications 69
Technical Info Section 1-17
Network Functions Sec. . . . 1-83

Contents of package

(1) Projector
(2) Remote control
with two AA batteries
(3) Power cord
(4) RGB cable
(5) Audio/Video cable
(6) Soft case
(7) User’s manuals
(8) Lens cover, Rivet and Strap
(9) Wireless Network Card
(10) Slot cover lock
(11) Application CD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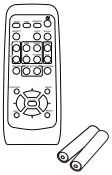
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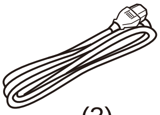
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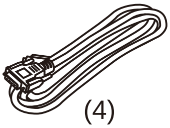
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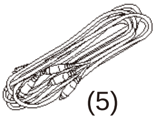
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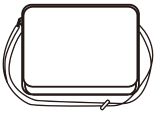
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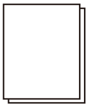
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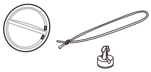
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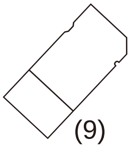
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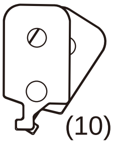
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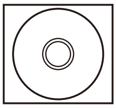
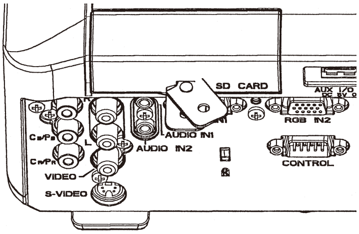
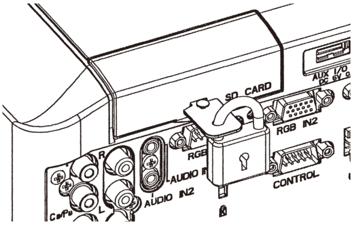

(11)

NOTE • Keep the original packing materials for future reshipment. For moving the projector, be sure to use the original packing materials. Use special caution for the lens part.

How to use the Slot cover lock


SD CARD
AUX I/O
RGB IN2
AUDIO IN1
AUDIO IN2
CONTROL
CB/PB
CR/PR
L
VIDEO
S-VIDEO

Open the Slot cover lock, and insert it into the Locking slot.


SD CARD
AUX I/O
RGB IN2
RGB
AUDIO IN
AUDIO IN2
CONTROL
R
L
CB/PB

Close the Slot cover lock slowly, and attach the Pad lock or Combination lock to the Slot cover lock.

Projector features

This projector is used to project various computer signals as well as NTSC/PAL/SECAM, Component (SD, HD) video signals onto a screen. It requires just a little space for installation and gets a large image from short distance.

❍ High Brightness
Newly developed 200W UHB (Ultra High Brightness) lamp gives you a brighter image on the screen. The image is bright enough for use in fully lighted rooms.

❍ Low Noise
WHISPER mode is available for reducing acoustic noise and quieter operation. It is perfect for use in dimly lighted rooms where low noise is more important than brightness.

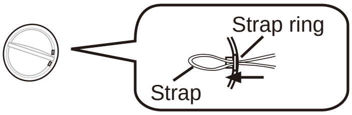
❍ Rich Connectivity
This projector has a variety of I/O ports. It can be easily connected to many signal sources like PC, DVD and so on. The rich connectivity provides you more options for an impressive presentation.

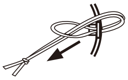
❍ Compact Body
Even with its many features, this projector has a small form factor.

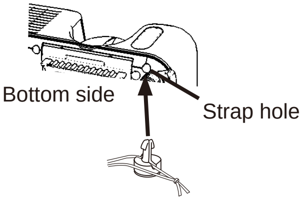
Preparations

Fastening the lens cover

To avoid losing the lens cover, please fasten it the lens cap to the projector using the strap.



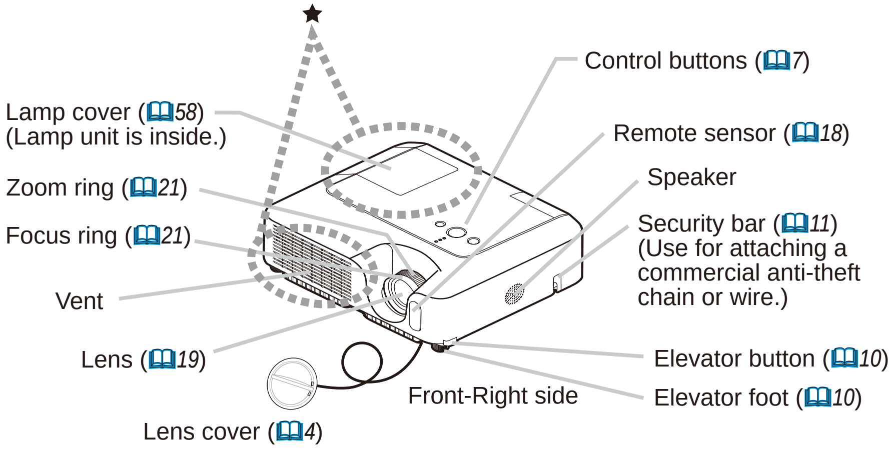




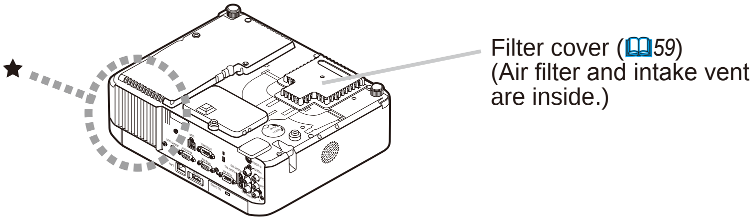
1. Fix the strap to the strap ring of the lens cover.
2. Put the strap into the groove on the rivet.
3. Push the rivet into the strap hole.

Part names

Projector

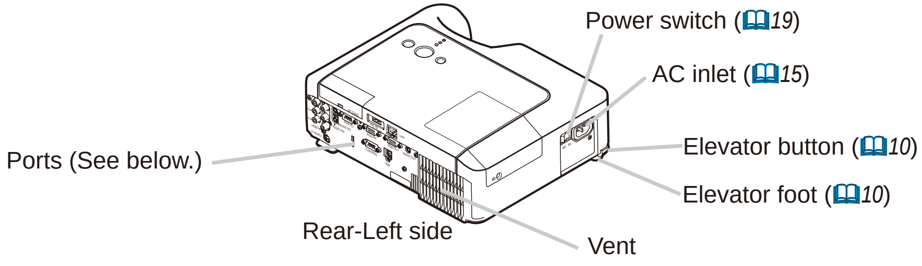

Control buttons (📖7)
Lamp cover (📖58)
(Lamp unit is inside.)
Remote sensor (📖18)
Speaker
Zoom ring (📖21)
Focus ring (📖21)
Security bar (📖11)
(Use for attaching a commercial anti-theft chain or wire.)
Vent
Lens (📖19)
Elevator button (📖10)
Elevator foot (📖10)
Lens cover (📖4)

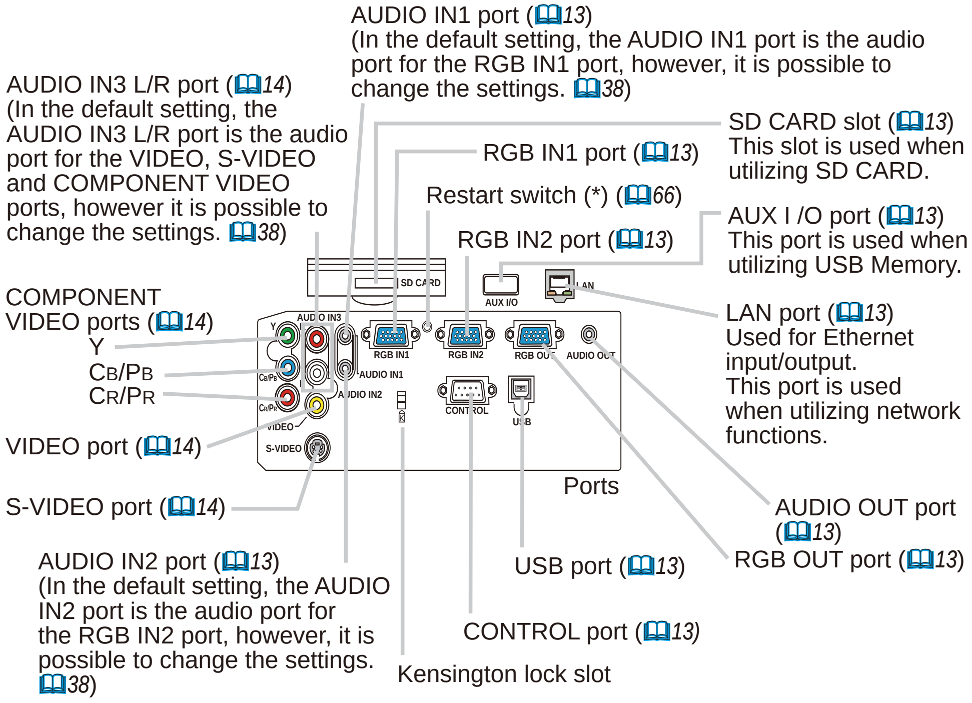
Front-Right side


Filter cover (📖59)
(Air filter and intake vent are inside.)

Bottom side

⚠WARNING ►During use or immediately after use, do not touch around the lamp and vents of the projector. (★) It could cause a burn.


Power switch (📖19)
AC inlet (📖15)
Elevator button (📖10)
Elevator foot (📖10)
Ports (See below.)
Rear-Left side
Vent


SD CARD
AUX I/O
LAN
AUDIO IN3
Y
CB/PB
CR/PR
VIDEO
S-VIDEO
RGB IN1
AUDIO IN1
AUDIO IN2
RGB IN2
RGB OUT
AUDIO OUT
CONTROL
USB
Ports

AUDIO IN1 port (📖13)
(In the default setting, the AUDIO IN1 port is the audio port for the RGB IN1 port, however, it is possible to change the settings. 📖38)

AUDIO IN3 L/R port (📖14)
(In the default setting, the AUDIO IN3 L/R port is the audio port for the VIDEO, S-VIDEO and COMPONENT VIDEO ports, however it is possible to change the settings. 📖38)

SD CARD slot (📖13)
This slot is used when utilizing SD CARD.

RGB IN1 port (📖13)

Restart switch (*) (📖66)

RGB IN2 port (📖13)

AUX I /O port (📖13)
This port is used when utilizing USB Memory.

COMPONENT VIDEO ports (📖14)
Y
CB/PB
CR/PR

LAN port (📖13)
Used for Ethernet input/output.
This port is used when utilizing network functions.

VIDEO port (📖14)

S-VIDEO port (📖14)

AUDIO OUT port (📖13)

RGB OUT port (📖13)

USB port (📖13)

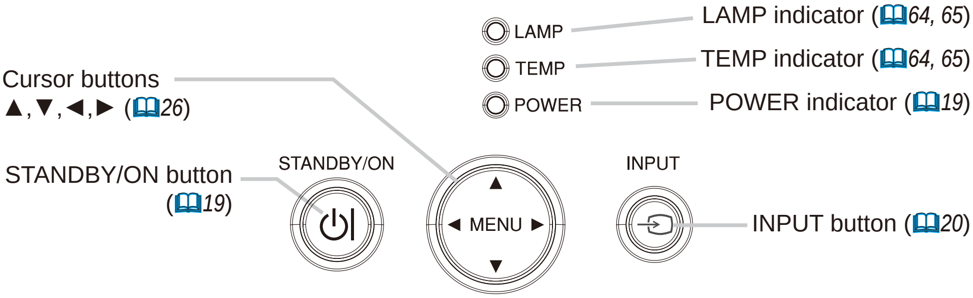
AUDIO IN2 port (📖13)
(In the default setting, the AUDIO IN2 port is the audio port for the RGB IN2 port, however, it is possible to change the settings. 📖38)

CONTROL port (📖13)

Kensington lock slot

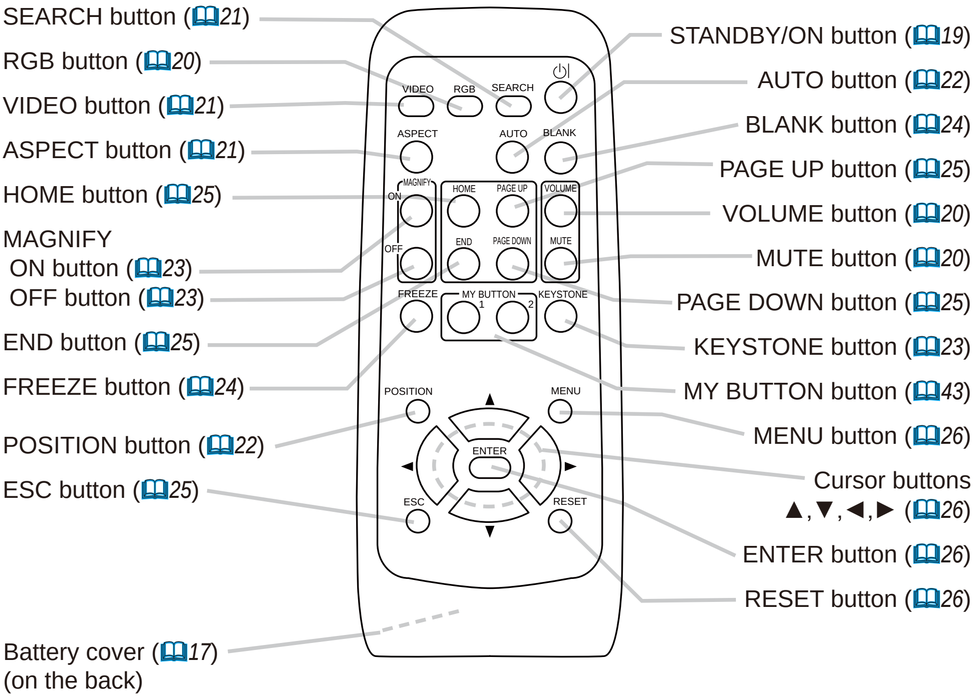
NOTE **(*) About Restart switch:** This projector is controlled by an internal microprocessor. Under certain exceptional circumstances, the projector may not operate correctly and the microprocessor will need to be reset. In such a case, please push the Restart switch by using a cocktail stick or similar, and before turning on again, make the projector cool down at least 10 minutes without operating. Only push the Restart switch in these exceptional instances.

Control buttons


LAMP
TEMP
POWER
LAMP indicator (📖64, 65)
TEMP indicator (📖64, 65)
POWER indicator (📖19)
Cursor buttons
▲,▼,◀,▶ (📖26)
STANDBY/ON button
(📖19)
STANDBY/ON
MENU
INPUT
INPUT button (📖20)

NOTE • INPUT button is function as ENTER key when the projector is in the PC-LESS presentation mode. Use the RGB button or VIDEO button on remote control to change the input port. When the projector menu is displayed, you can change the input port by INPUT button.

Remote control


SEARCH button (📖21)
RGB button (📖20)
VIDEO button (📖21)
ASPECT button (📖21)
HOME button (📖25)
MAGNIFY
ON button (📖23)
OFF button (📖23)
END button (📖25)
FREEZE button (📖24)
POSITION button (📖22)
ESC button (📖25)
Battery cover (📖17)
(on the back)
STANDBY/ON button (📖19)
AUTO button (📖22)
BLANK button (📖24)
PAGE UP button (📖25)
VOLUME button (📖20)
MUTE button (📖20)
PAGE DOWN button (📖25)
KEYSTONE button (📖23)
MY BUTTON button (📖43)
MENU button (📖26)
Cursor buttons
▲,▼,◀,▶ (📖26)
ENTER button (📖26)
RESET button (📖26)
VIDEO
RGB
SEARCH
ASPECT
AUTO
BLANK
MAGNIFY
ON
OFF
HOME
PAGE UP
VOLUME
END
PAGE DOWN
MUTE
FREEZE
MY BUTTON
1
2
KEYSTONE
POSITION
MENU
ENTER
ESC
RESET

Setting up

⚠WARNING ►Place the projector in a stable position horizontally. A fall or a turnover could cause an injury and/or damage to the projector. Then using damaged projector could result in a fire and/or an electric shock.

- Do not place the projector on an unstable, slant or vibrant surface such as a wobbly or inclined stand.
- Do not place the projector in the side/front/rear-up position, except cleaning the air filter.

►Place the projector in a cool place, and pay attention enough to ventilation. The high temperature of the projector could cause a fire, a burn and/or malfunction to the projector.

- Do not stop up, block and cover the projector's vents.
- Keep a space of 30 cm or more between the sides and other objects such as walls.
- Do not place the projector on a metallic thing or anything weak in heat.
- Do not place the projector on a carpet, cushion or bedding.
- Do not place the projector in direct sunlight or near a hot object such as a heater.
- Put nothing about lens and vents of the projector. Put nothing on the projector.
- Put nothing that is sucked or sticks to the bottom of projector. This projector has some intake vents also on the bottom.

►Do not place the projector on the place that gets wet. Damping the projector or inserting liquid in the projector could cause a fire, an electric shock and/or malfunction to the projector.

- Do not place the projector in a bathroom or the outdoors.
- Put nothing containing the liquid near the projector.

⚠CAUTION ►Avoid a smoky, humid or dusty place. Placing the projector in such place could cause a fire, an electric shock and/or malfunction to the projector.

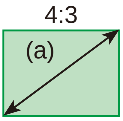
- Do not place the projector near a humidifier, a smoking space or a kitchen.

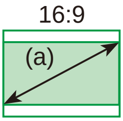
►Adjust the position of the projector to prevent any strong light, like direct sunlight or inverter fluorescent lamp light, from hitting the projector’s remote sensor.

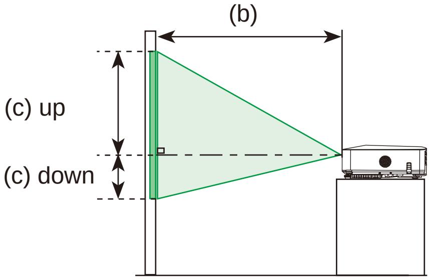
Arrangement

Refer to the illustrations and tables below to determine the screen size and projection distance.

The values shown in the table are calculated for a full size screen: 1024×768
(a) The screen size (diagonal)
(b) Distance from the projector to the screen (±10%)
(c) The height of the screen (±10%)





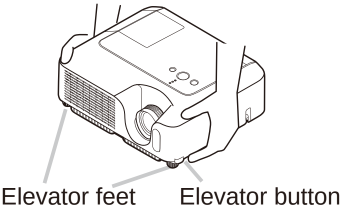


(a) Screen size [inch (m)]	4 : 3 screen				16 : 9 screen			
	(b) Projection distance [m (inch)]		(c) Screen height [cm (inch)]		(b) Projection distance [m (inch)]		(c) Screen height [cm (inch)]	
	min.	max.	down	up	min.	max.	down	up
30 (0.8)	0.9 (34)	1.1 (41)	5 (2)	41 (16)	1.0 (38)	1.1 (45)	-1 (0)	39 (15)
40 (1.0)	1.2 (46)	1.4 (56)	6 (2)	55 (22)	1.3 (50)	1.5 (61)	-2 (-1)	51 (20)
50 (1.3)	1.5 (58)	1.8 (70)	8 (3)	69 (27)	1.6 (63)	1.9 (76)	-2 (-1)	64 (25)
60 (1.5)	1.8 (70)	2.1 (84)	9 (4)	82 (32)	1.9 (76)	2.3 (91)	-2 (-1)	77 (30)
70 (1.8)	2.1 (81)	2.5 (98)	11 (4)	96 (38)	2.3 (89)	2.7 (107)	-3 (-1)	90 (35)
80 (2.0)	2.4 (93)	2.8 (112)	12 (5)	110 (43)	2.6 (102)	3.1 (122)	-3 (-1)	103 (41)
90 (2.3)	2.7 (105)	3.2 (126)	14 (5)	123 (49)	2.9 (115)	3.5 (138)	-4 (-1)	116 (46)
100 (2.5)	3.0 (117)	3.6 (140)	15 (6)	137 (54)	3.2 (127)	3.9 (153)	-4 (-2)	129 (51)
120 (3.0)	3.6 (140)	4.3 (169)	18 (7)	165 (65)	3.9 (153)	4.7 (184)	-5 (-2)	154 (61)
150 (3.8)	4.5 (176)	5.4 (211)	23 (9)	206 (81)	4.9 (192)	5.8 (230)	-6 (-2)	193 (76)
200 (5.1)	6.0 (235)	7.2 (282)	30 (12)	274 (108)	6.5 (256)	7.8 (307)	-8 (-3)	257 (101)
250 (6.4)	7.5 (294)	9.0 (353)	38 (15)	343 (135)	8.1 (320)	9.8 (384)	-10 (-4)	322 (127)
300 (7.6)	9.0 (352)	10.8 (423)	46 (18)	411 (162)	9.8 (384)	11.7 (461)	-12 (-5)	386 (152)

Adjusting the projector's elevator

⚠CAUTION ►If you press the elevator button without holding the projector, the projector might crash down, overturn, smash your fingers and possibly result in malfunction. To prevent damaging the projector and injuring yourself, always hold the projector whenever using the elevator buttons to adjust the elevator feet.
►Do not incline the projector rightward or leftward. Also do not incline it backward or forward exceeding 30 degrees. Exceeding these range could cause malfunction, and could shorten the lifetime of the consumables.
►Except for inclining by the elevator feet adjustment, place the projector horizontally.

You can use the elevator feet to make adjustments if the surface on which you need to set the projector is uneven or if you otherwise need to adjust the angle of projection. The adjustment range of the elevator feet is 0 to 9 degrees.



1. After making sure that the projector is cool adequately, press and hold in the elevator buttons while holding the projector.
   The elevator buttons and the elevator feet are on the both sides.
2. Raise or lower the projector to the desired height and release the elevator buttons.
   When you release the elevator buttons, the elevator feet will lock into position.
3. If necessary, you can also finely adjust the height of the projector by twisting the elevator feet by hand.

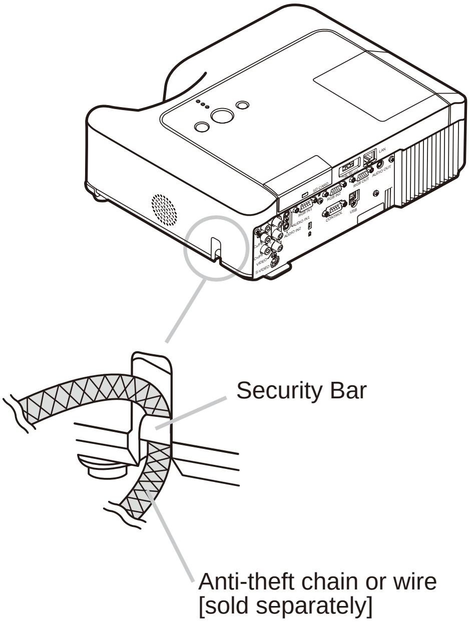
Using the Security Bar

⚠WARNING ►Do not use the security bar to prevent the projector from falling. Dropping or knocking over the projector may cause damage or injury.

⚠CAUTION ►The security bar is not a comprehensive theft prevention measure. It is intended to be used as an extra theft prevention measure.

A commercial anti-theft chain or wire can be attached to the security bar on the projector.

1. **How to attach**
   An anti-theft chain or wire can be attached as shown in the illustration. (Anti-theft chains or wires of up to 10mm in diameter can be used)



Connecting your devices

⚠CAUTION ►Turn off all devices prior to connecting them to the projector. Attempting to connect a live device to the projector may generate extremely loud noises or other abnormalities that may result in malfunction and/or damage to the device and/or projector.
►Use the accessory cable or a designated-type cable for the connection. Some cables have to be used with core set. A too long cable may cause a certain picture degradation. Please consult with your dealer for details. For cables that have a core only at one end, connect the core to the projector.
►Make sure that you connect devices to the correct port. Incorrect connection may result in malfunction and/or damage to the device and/or projector.

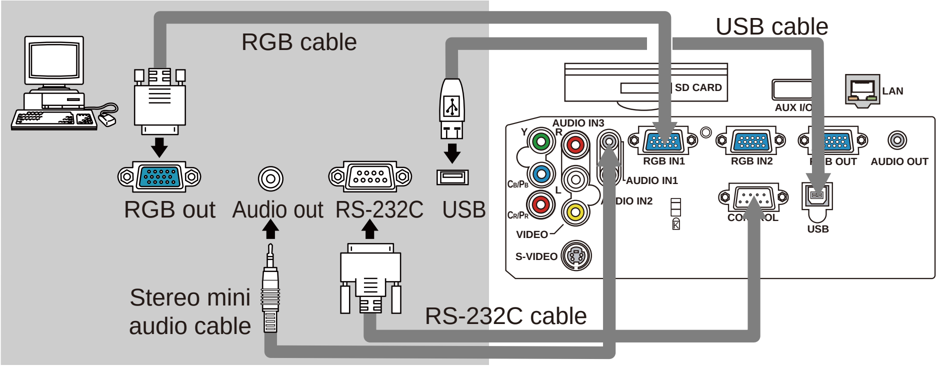
NOTE • Whenever attempting to connect a laptop computer to the projector, be sure to activate the laptop's RGB external image output (set the laptop to CRT display or to simultaneous LCD and CRT display). For details on how this is done, please refer to the instruction manual of the corresponding laptop computer.
• Secure the screws on the connectors and tighten.
• Some computers may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
• For some RGB signal modes, the optional Mac adapter is necessary.
• When the image resolution is changed on a computer, depending on an input, automatic adjustment function may take some time and may not be completed. In this case, you may not be able to see a check box to select "Yes/No" for the new resolution on Windows. Then the resolution will go back to the original. It might be recommended to use other CRT or LCD monitors to change the resolution.

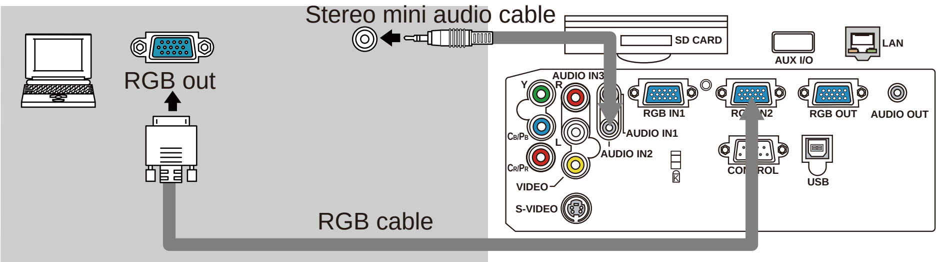
About Plug-and-Play capability

Plug-and-Play is a system composed of the computer, its operating system and peripheral equipment (i.e. display devices). This projector is compatible with VESA DDC 2B. Plug-and-Play can be achieved by connecting this projector to a computer is VESA DDC (display data channel) compatible.
• Please take advantage of this function by connecting the accessory RGB cable to the RGB IN1 port (DDC 2B compatible). Plug-and-Play may not work properly if any other type of connection is attempted.
• Please use the standard drivers in your computer as this projector is a Plug-and-Play monitor.

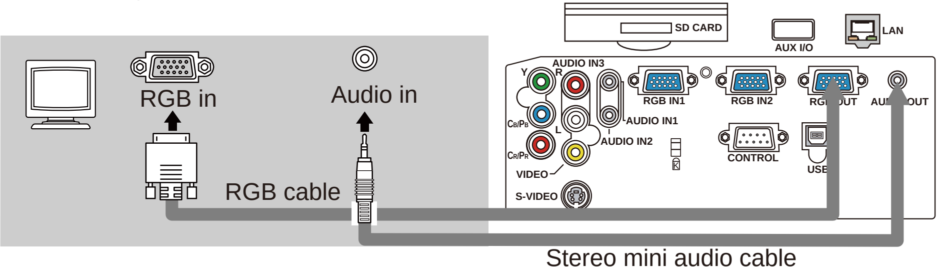
Examples of connection with a computer

* In the default setting, the AUDIO IN1 port is the audio port for the RGB IN1, and the AUDIO IN2 port is the audio port for the RGB IN2 ports. To change the settings, refer to the AUDIO item in the SETUP menu. (📖*38*)

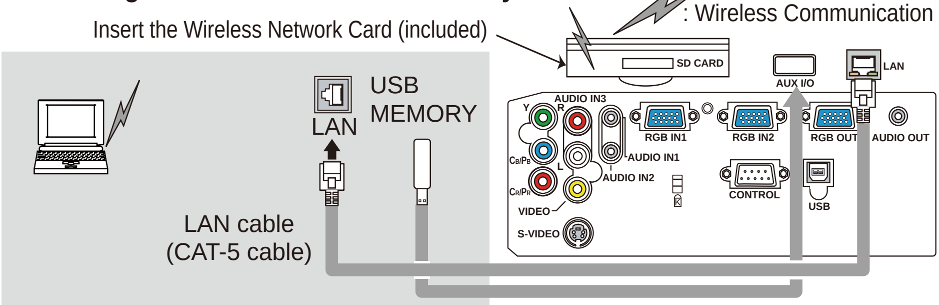

RGB cable
USB cable
RGB out
Audio out
RS-232C
USB
Stereo mini audio cable
RS-232C cable
SD CARD
AUX I/O
LAN
AUDIO IN3
Y
R
CB/PB
L
CR/PR
VIDEO
S-VIDEO
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN1
AUDIO IN2
CONTROL
USB


Stereo mini audio cable
RGB out
RGB cable
SD CARD
AUX I/O
LAN
AUDIO IN3
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN1
AUDIO IN2
CONTROL
USB
VIDEO
S-VIDEO

Connecting to a monitor (output) and a speaker with amplitier (output)


RGB in
Audio in
RGB cable
Stereo mini audio cable
SD CARD
AUX I/O
LAN
AUDIO IN3
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN1
AUDIO IN2
CONTROL
USB
VIDEO
S-VIDEO

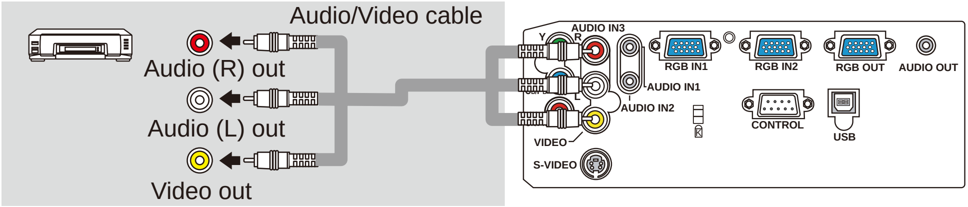
Connecting to a Network and USB Memory

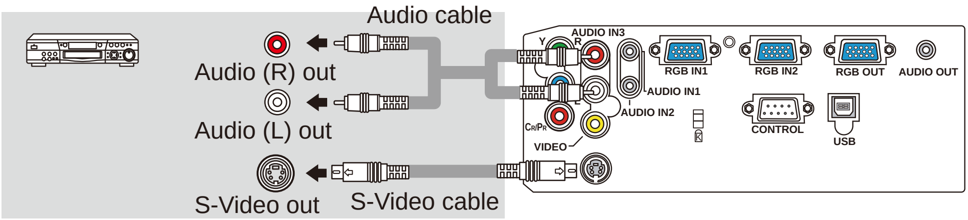

Insert the Wireless Network Card (included)
: Wireless Communication
LAN
USB MEMORY
LAN cable (CAT-5 cable)
SD CARD
AUX I/O
LAN
AUDIO IN3
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN1
AUDIO IN2
CONTROL
USB
VIDEO
S-VIDEO

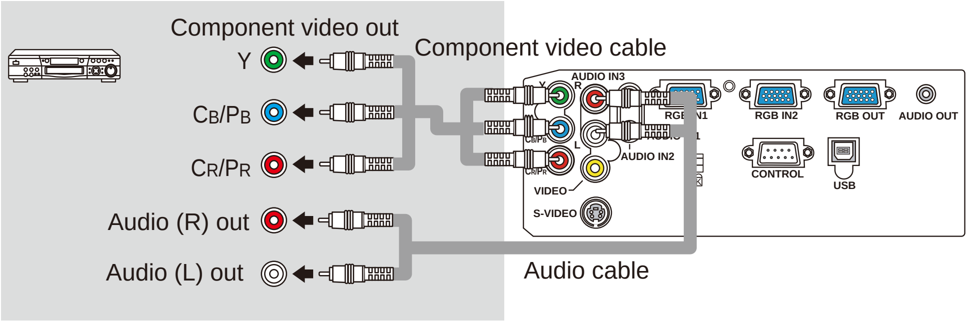
⚠CAUTION ►For safety, do not connect LAN port to any network that might have the excessive voltage.

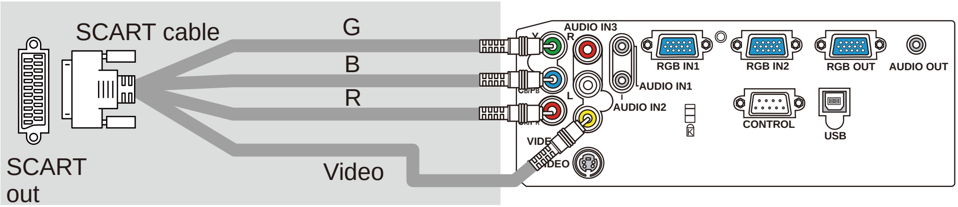
Examples of connection with a VCR/DVD player

* In the default setting, the AUDIO IN3 L/R port is the audio port for the VIDEO, S-VIDEO and COMPONENT VIDEO ports. To change the settings, refer to the AUDIO item in the SETUP menu. (📖*38*)


Audio/Video cable
Audio (R) out
Audio (L) out
Video out
AUDIO IN3
Y
R
L
CB/PB
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN1
AUDIO IN2
CONTROL
USB
VIDEO
S-VIDEO

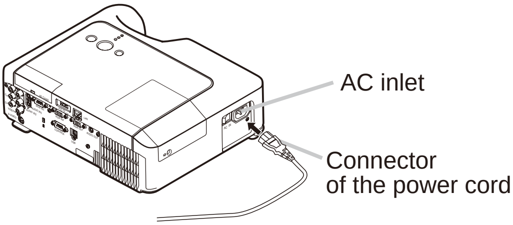

Audio cable
Audio (R) out
Audio (L) out
S-Video out
S-Video cable
AUDIO IN3
Y
R
L
CR/PR
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN1
AUDIO IN2
CONTROL
USB
VIDEO


Component video out
Y
CB/PB
CR/PR
Audio (R) out
Audio (L) out
Component video cable
Audio cable
AUDIO IN3
Y
R
L
CB/PB
CR/PR
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN2
CONTROL
USB
VIDEO
S-VIDEO


SCART cable
SCART out
G
B
R
Video
AUDIO IN3
Y
R
L
CB/PB
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN1
AUDIO IN2
CONTROL
USB

Connecting power supply

⚠WARNING ►Please use extra caution when connecting the power cord, as incorrect or faulty connections may result in fire and/or electrical shock.
- Only use the power cord that came with the projector. If it is damaged, contact your dealer to newly get correct one.
- Only plug the power cord into an outlet rated for use with the power cord's specified voltage range.
- Never modify the power cord. Never attempt to defeat the ground connection of the three-pronged plug.



1. Connect the connector of the power cord to the AC inlet of the projector.

2. Firmly plug the power cord's plug into the outlet.

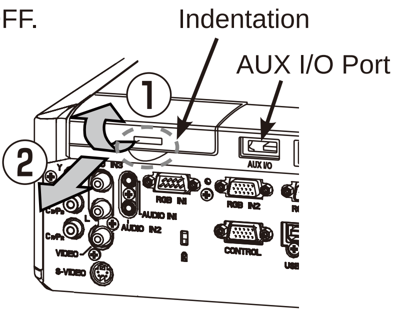
Inserting an SD Card and USB Memory

When using the projector with a wireless LAN please insert the included Wireless Network Card.
When using a commercial SD Memory card in order to view images insert the SD Memory card in the same manner.
And when using a commercial USB MEMORY in order to view images insert the USB MEMORY to the AUX I/O port. (📖*13*)
See User's Manual - Network Function for information on using either type of card.

1. Make sure the projector’s power switch is OFF.

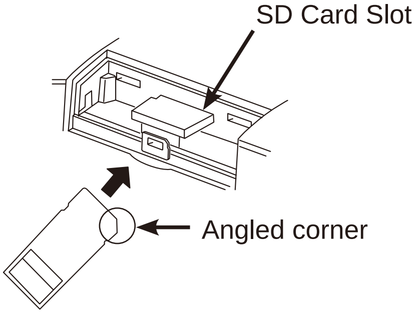
2. Remove the SD card slot cover.

   ① Lift the cover slightly by the small indentation in the middle of the front of the cover using a finger nail or other means.
   ② Pull the cover forward and remove it completely from the projector.



3. Insert the SD card.
   Slowly insert the SD card completely into the SD card slot.

Make sure the angled corner of the SD card is facing the right side (AUX I/O port side) of the projector while inserting.



4. Replace the SD card slot cover.
   Replace the cover by reversing the procedure used when removing the cover.

NOTE • When using the projector with a wired LAN, please remove the Wireless Network card.
• Select the "REMOVE MEDIA" on MIU menu before SD card or USB memory is removed.

NOTE • The LED becomes downward in some USB Memory. Remove the USB Memory after the accessing is completely finished.

IMPORTANT NOTE • To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

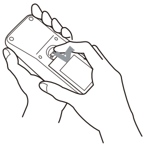
Remote control

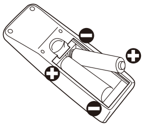
Putting batteries

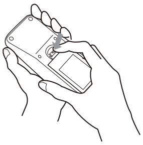
⚠WARNING ►Always handle the batteries with care and use them only as directed. Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

And also improper use may result in cracking or leakage, which could result in fire, injury and/or pollution of the surrounding environment.

- Be sure to use only the batteries specified. Do not use batteries of different types at the same time. Do not mix a new battery with used one.
- Make sure the plus and minus terminals are correctly aligned when loading a battery.
- Keep a battery away from children and pets. If swallowed consult a physician immediately for emergency treatment.
- Do not short circuit or solder a battery.
- Do not allow a battery in a fire or water. Keep batteries in a dark, cool and dry place.
- If you observe a leakage of a battery, wipe out the flower and then replace a battery. If the liquid adheres to your body or clothes, rinse well with water immediately.
- Obey the local laws on disposing the battery.







1. Remove the battery cover.
   Slide back and remove the battery cover in the direction of the arrow.
2. Insert the batteries.
   Align and insert the two AA batteries according to their plus and minus terminals as indicated in the remote control.
3. Close the battery cover.
   Replace the battery cover in the direction of the arrow and snap it back into place.

Using the remote control

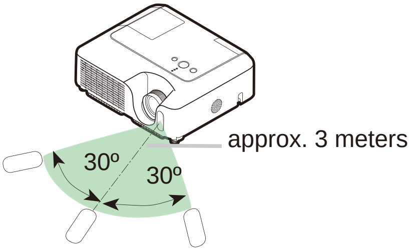
⚠CAUTION ►Be careful in handling the remote control.
- Do not drop or expose the remote control to physical impact.
- Do not get the remote control wet or place it on wet objects. It may result in malfunction.
- Remove the batteries from the remote control and store them in a safe place if you won’t be using the remote control for an extended period.
- Replace the batteries whenever the remote control starts malfunctioning.
- When strong lights (such as direct sunlight) or light from an extremely close range (such as from an inverter fluorescent lamp), hit the projector’s remote sensor, the remote control may cause to function. Adjust the direction of the projector to keep the light from directly hitting the projector’s remote sensor.

The signal settings for the remote control transmitter and the projector's remote sensor can be changed. If the remote control does not function properly try changing the signal setting.

Changing the signal setting for the remote control transmitter
(1)Setting 1 (FREQ. : NORMAL)
Simultaneously press and hold the MUTE and RESET buttons for about 3 seconds.
(2)Setting 2 (FREQ. : HIGH)
Simultaneously press and hold the MAGNIFY OFF and ESC buttons for about 3 seconds.
- Setting 1 is the factory default setting.
- When the batteries are removed from the remote control, user-specified settings are saved for about half a day. If the batteries are removed from the remote control for longer than half a day, the remote will reset to Setting 1.

Changing the signal setting for the projector's remote sensor
Switch between Setting 1 and 2 using the SERVICE/REMOTE FREQ. item found in OPTION MENU. (📖*45*)
If the remote control does not seem to function properly, try changing the settings for the remote control and the projector's remote sensor.
The remote control will not function properly if the remote control transmitter settings and the projector's remote sensor settings are not the same.

The remote control works with the projector’s remote sensor.



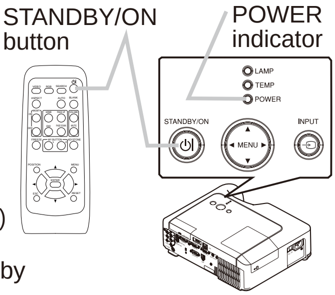
- The range of the remote sensor is 3 meters with a 60 degree range (30 degrees to the left and right of the remote sensor).
- Also a remote signal reflected in the screen etc. may be available. If it is difficult to send a remote signal to the sensor directly, please try to use the reflected signal.
- Since the remote control uses infrared light to send signals to the projector (Class1 LED), be sure to use the remote control in an area free from obstacles that could block the remote control’s output signal to the projector.

Power on/off

⚠WARNING ►When the power is on, a strong light is emitted. Do not look into the lens of projector. Also do not peep at the inside of projector through a hole.

NOTE • Turn the power on/off in right order. Please power on the projector prior to the connected devices. Power off the projector later than the connected devices.

Turning on the power



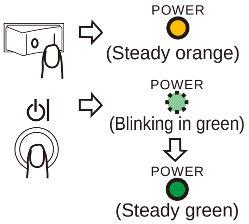
1. Make sure that the power cord is firmly and correctly connected to the projector and the outlet.

2. Remove the lens cover, and set the power switch to the ON position.
The power indicator will light up in steady orange. Then wait several seconds because the buttons may not function for these several seconds.

(1) When AUTO ON in the OPTION menu is set to TURN ON:(📖*42*)
The lamp will only be automatically turned on when the Power switch is turned on after the power was turned off by Power switch last time. Afterwards the POWER indicator will begin blinking in green. When the power is completely on, the indicator will stop blinking and light in green.

(2) When AUTO ON in the OPTION menu is set to TURN OFF please see step 3.

3. Press the STANDBY/ON button on the projector or the remote control.

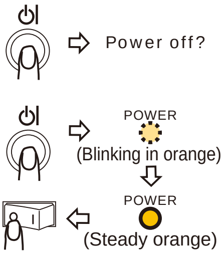


To display the picture, select an input signal according to the section "Selecting an input signal" (📖*20*).

Turning off the power

Please pay special attention to below two points when you do:

(1) Please do not turn the projector on again for at least 10 minute in this case. Neglect could shorten the lifetime of the lamp.
(2) During use or immediately after use, do not touch around the lamp and vents of the projector (📖*5* ★) It could cause a burn.
(3) Remove the SD memory or USB memory before turn off the power switch.



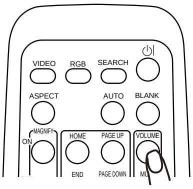
1. Press the STANDBY/ON button on the projector or the remote control.
The message "Power off?" will appear on the screen for about 5 seconds.

2. Press the STANDBY/ON button on the projector or the remote control again while the message appears.
The projector lamp will go off, and the POWER indicator will begin blinking in orange.
Then the POWER indicator will stop blinking and light in steady orange when the lamp cooling is complete.

3. Make sure that the power indicator lights in steady orange, and set the power switch to the OFF position. The POWER indicator will go off. Attach the lens cover.

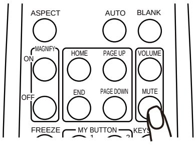
Operating

Adjusting the volume


VIDEO
RGB
SEARCH
ASPECT
AUTO
BLANK
MAGNIFY
ON
HOME
PAGE UP
VOLUME
END
PAGE DOWN

1. Press the VOLUME button on the remote control.
   A dialog will appear on the screen to aid you in adjusting the volume.
2. Use the cursor buttons ▲/▼ to adjust the volume.
   To close the dialog and complete the operation, press the VOLUME button again. Even if you don't do anything, the dialog will automatically disappear after a few seconds.

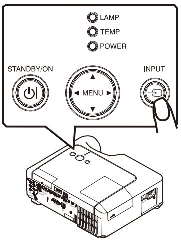
Temporarily muting the sound


ASPECT
AUTO
BLANK
MAGNIFY
ON
OFF
HOME
PAGE UP
VOLUME
END
PAGE DOWN
MUTE
FREEZE
MY BUTTON
KEYS

1. Press the MUTE button on the remote control.
   A dialog will appear on the screen indicating that you have muted the sound.

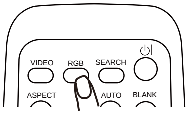
To restore the sound, press the MUTE or VOLUME button. Even if you don't do anything, the dialog will automatically disappear after a few seconds.

Selecting an input signal


LAMP
TEMP
POWER
STANDBY/ON
INPUT
MENU

1. Press the INPUT button on the projector.
   Each time you press the button, the projector switches its input port as below.

→ RGB IN1 → RGB IN2 → MIU
VIDEO ← S-VIDEO ← COMPONENT VIDEO ←

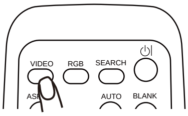

VIDEO
RGB
SEARCH
ASPECT
AUTO
BLANK

1. Press the RGB button on the remote control to select an input port for the RGB signal.
   Each time you press the button, the projector switches its RGB input port as below.

RGB IN1 → RGB IN2 → MIU
↑

- If the RGB button is pushed (when switching from VIDEO to RGB signals) when TURN ON is selected for the AUTO SEARCH item in the OPTION menu the projector will check the RGB IN1 port first. If no input is detected at the port, the projector will check the RGB IN2 port.

Selecting an input signal (continued)

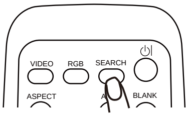


1. Press the VIDEO button on the remote control to select an input for video signal.
   Each time you press the button, the projector switches its video input port as below.

   COMPONENT VIDEO → S-VIDEO → VIDEO

- If the VIDEO button is pushed (when switching from RGB to VIDEO signals) when TURN ON is selected for the AUTO SEARCH item in the OPTION menu the projector will check the COMPONENT VIDEO port first. If no input is detected at the port, projector will begin to check other ports in above order.

Searching an input signal



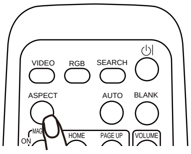
1. Press the SEARCH button on the remote control.
   The projector will start to check its input ports in order to find any input signals.
   When an input is found, the projector will stop searching and display the image. If no signal is found, the projector will return to the state selected before the operation.

   RGB IN 1 → RGB IN 2 → MIU → COMPONENT VIDEO → S-VIDEO → VIDEO

Selecting an aspect ratio

1. Press the ASPECT button on the remote control.
   Each time you press the button, the projector switches the mode for aspect ratio in turn.

   ❍ **For an RGB and MIU signal**
   NORMAL → 4:3 → 16:9 → SMALL

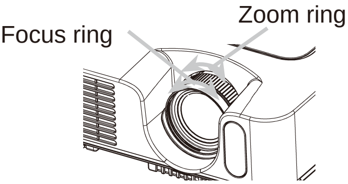


   ❍ **For a video signal, s-video signal or component video signal**
   4:3 → 16:9 → 14:9 → SMALL

   ❍ **For a no signal**
   4:3 (fixed)

- The NORMAL mode keeps the original aspect ratio of the signal.
- Performing the automatic adjustment initializes the aspect ratio setting.

Adjusting the zoom and focus

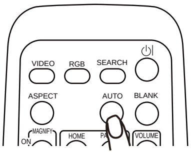


1. Use the zoom ring to adjust the screen size.

2. Use the focus ring to focus the picture.

Using the automatic adjustment feature

1. Press the AUTO button on the remote control.



❍ **For an RGB signal**
The vertical position, the horizontal position, the horizontal phase and the horizontal size will be automatically adjusted. And the aspect ratio will be automatically set to default. Make sure that the application window is set to its maximum size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting.

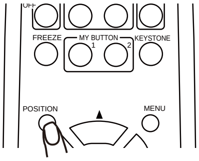
❍ **For a video signal or s-video signal**
The video format best suited for the respective input signal will be selected automatically.
This function is available only when the AUTO mode is selected to the VIDEO FORMAT item in the INPUT menu (📖*35*). For a component video signal, the signal type is identified automatically independently of this function.

❍ **For a video signal, s-video signal or component video signal**
The vertical position, horizontal position and aspect ratio will be automatically set to default.

❍ **For a component video signal**
The horizontal phase will be automatically set to default.

● The automatic adjustment operation requires about 10 seconds. Also please note that it may not function correctly with some input.

Adjusting the position



1. Press the POSITION button on the remote control.
The “POSITION” indication will appear on the screen.

2. Use the cursor buttons ▲/▼/◄/► to adjust the picture position.

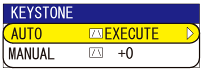
When you want to reset the operation, press the RESET button on the remote control during the operation.

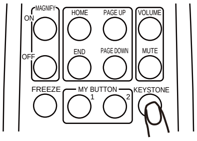
To complete this operation, press the POSITION button again. Even if you don’t do anything, the dialog will automatically disappear after a few seconds.

● When this function is performed at a video signal, a certain extra such as a line may appear outside a picture.

Correcting the keystone distortions

1. Press the KEYSTONE button on the remote control. A dialog will appear on the screen to aid you in correcting the distortion.



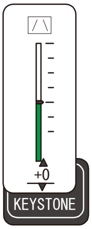


2. Use the cursor buttons ▲/▼ to select AUTO or MANUAL operation, and press the button ► to perform the following.

   1) AUTO executes automatic vertical keystone correction.

   2) MANUAL displays a dialog for vertical keystone correction. Use the buttons ▲/▼ for adjustment.

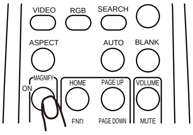
   To close the dialog and complete this operation, press the KEYSTONE button again. Even if you don't do anything, the dialog will automatically disappear after a few seconds.



- The adjustable range for correction will vary among inputs. For some input, this function may not work well.
- When V:INVERT or H&V:INVERT is selected to the MIRROR item in the SETUP menu, if the projector screen is inclined or angled downward, the Auto Keystone function may not work correctly.
- When the zoom adjustment is set to the TELE (telephoto focus), this correction may be excessive. This function should be used when the zoom adjustment is set to the WIDE (wide-angle focus) whenever possible.
- When vertical degree is almost 0 degree, the automatic keystone distortion correction may not work.
- When vertical degree is almost ±30 degree, the automatic keystone distortion correction may not work well.
- This function will be unavailable when Transition Detector is on (📖*50*).

Using the magnify feature

1. Press the ON button of MAGNIFY on the remote control. The "MAGNIFY" indication will appear on the screen (although the indication will disappear in several seconds with no operation), and the projector will enter the MAGNIFY mode.



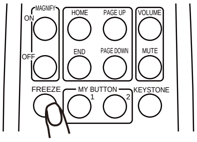
2. Use the cursor buttons ▲/▼ to adjust the zoom level.

   To move the zoom area, press the POSITION button in the MAGNIFY mode, then use the cursor buttons ▲/▼/◄/► to move the area. And to finalize the zoom area, press the POSITION button again.

   To exit the MAGNIFY mode and restore the screen to normal, press the OFF button of MAGNIFY on the remote control.

- The projector automatically exits the MAGNIFY mode when the input signal is changed, or when the display condition is changed.
- Although in the MAGNIFY mode, the keystone distortion condition may vary, it will be restored when the projector exits the MAGNIFY mode.

Freezing the screen

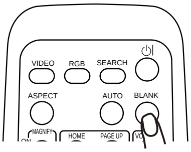

MAGNIFY
ON
OFF
HOME
PAGE UP
VOLUME
END
PAGE DOWN
MUTE
FREEZE
MY BUTTON
1
2
KEYSTONE

1. Press the FREEZE button on the remote control.
   The “FREEZE” indication will appear on the screen, and the projector will enter the FREEZE mode.

   To exit the FREEZE mode and restore the screen to normal, press the FREEZE button again.

- The projector automatically exits the FREEZE mode when the input signal changes, or when one of the projector’s buttons or the remote control buttons of STANDBY/ON, SEARCH, RGB, VIDEO, BLANK, AUTO, ASPECT, VOLUME, MUTE, KEYSTONE, POSITION, MENU, MAGNIFY and MY BUTTON is pressed.
- If the projector continues projecting a still image for a long time, the LCD panel might possibly be printed. Do not leave the projector in the FREEZE mode for too long.

Temporarily blanking the screen


VIDEO
RGB
SEARCH
ASPECT
AUTO
BLANK
MAGNIFY
HOME
PAGE UP

1. Press the BLANK button on the remote control.
   The blank screen will be displayed instead of the screen of input signal. Please refer to the BLANK item in the SCREEN menu (📖*39*).

   To exit the blank screen and return to the input signal screen, press the BLANK button again.

- The projector automatically returns to the input signal screen when one of the projector’s buttons or the remote control buttons is pressed or one of the commands (except get commands) is transmitted to the control port.

Operating the computer screen

⚠CAUTION ►Mistaken use of the mouse/keyboard control could damage your equipment.

- While using this function, please connect only with a computer.
- Before connecting, read the manuals of the computer you will connect.

NOTE • It may not be possible to control notebook PC, and other computers with built-in pointing device (e.g. track ball), using this remote control. In this case, before connecting go into BIOS (system setup) and select external mouse, and disable the pointing device. In addition, the mouse may not function if the computer does not have the needed utility program. See your computer's hardware manual for details.

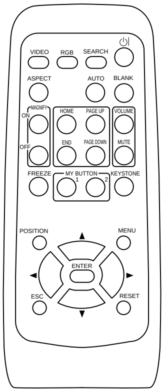
• The USB control can be used with Windows 95 OSR 2.1 or higher. It may not be possible to use the remote control, depending on the computer's configurations and mouse drivers.

• The USB control can be used only for the functions listed below. You cannot do things like press two buttons at once (for instance, pressing two buttons at the same time to move the mouse pointer diagonally).

• This function is not available while the lamp is warming up (the POWER indicator flashes green), and while adjusting the volume and display, correcting for trapezoidal distortion, zooming in on the screen, using the BLANK function, or displaying the menu screen.

USB mouse and keyboard control

1. Connect the projector's USB port to the computer via the mouse cable.

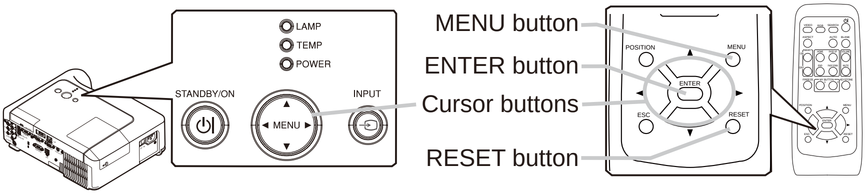


Available function	Remote control operation
Move pointer	Use ▲, ▼, ◄, ► buttons
Left click with mouse	Press ENTER button
Right click with mouse	Press RESET button
Press keyboard's HOME key	Press HOME button
Press keyboard's END key	Press END button
Press keyboard's PAGE UP key	Press PAGE UP button
Press keyboard's PAGE DOWN key	Press PAGE DOWN button
Press keyboard's ESC key	Press ESC button

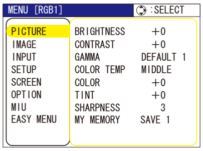
Multifunctional settings

Using the menu function

This projector has the following menus: PICTURE, IMAGE, INPUT, SETUP, SCREEN, OPTION, MIU, and EASY MENU. EASY MENU consists of functions often used, and the other menus are classified into each purpose. Each of these menus is operated using the same methods. The basic operations of these menus are as follows.



1. Press the MENU button on the remote control or one of the cursor buttons on the projector.
   The Advanced MENU or EASY MENU will appear.



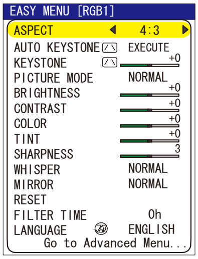
MENU [RGB1] :SELECT

PICTURE
IMAGE
INPUT
SETUP
SCREEN
OPTION
MIU
EASY MENU

BRIGHTNESS +0
CONTRAST +0
GAMMA DEFAULT 1
COLOR TEMP MIDDLE
COLOR +0
TINT +0
SHARPNESS 3
MY MEMORY SAVE 1

In the EASY MENU

2. If you want to change it to the Advanced MENU, select the "Go to Advanced Menu"
3. Use the cursor buttons ▲/▼ to select an item to operate.
4. Use the cursor buttons◄/► to operate the item.



EASY MENU [RGB1]

ASPECT ◄ 4:3 ►
AUTO KEYSTONE EXECUTE
KEYSTONE +0
PICTURE MODE NORMAL
BRIGHTNESS +0
CONTRAST +0
COLOR +0
TINT +0
SHARPNESS 3
WHISPER NORMAL
MIRROR NORMAL
RESET
FILTER TIME 0h
LANGUAGE ENGLISH
Go to Advanced Menu...

In the Advanced MENU

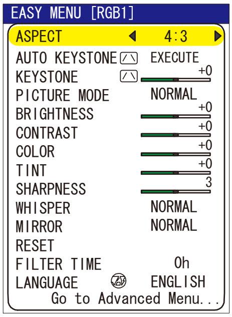
2. Use the cursor buttons ▲/▼ to select a menu.
   If you want to change it to the EASY MENU, select the EASY MENU.
   Then press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to select an item. The display of the selected menu will be active.
3. Use the cursor buttons ▲/▼ to select an item to operate.
   Then press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to progress. The operation menu of the selected item will appear.
4. Use the cursor buttons▲/▼ to operate the item.

- When you want to reset the operation, press the RESET button on the remote control during the operation. Note that items whose functions are performed simultaneously with operation (ex. LANGUAGE, H PHASE, VOLUME etc.) cannot be reset.
- In the advanced menu, when you want to return to the previous display, press the cursor button ◄ on the projector or remote control, or the ESC button on the remote control.

5. Press the MENU button on the remote control again to close the menu and complete this operation. Even if you don't do anything, the dialog will automatically disappear after about 10 seconds.

- Some functions cannot be performed when a certain input port is selected, or when a certain input signal is displayed.

EASY Menu



EASY MENU [RGB1]

ASPECT ◀ 4:3 ▶
AUTO KEYSTONE EXECUTE
KEYSTONE +0
PICTURE MODE NORMAL
BRIGHTNESS +0
CONTRAST +0
COLOR +0
TINT +0
SHARPNESS 3
WHISPER NORMAL
MIRROR NORMAL
RESET
FILTER TIME 0h
LANGUAGE ENGLISH
Go to Advanced Menu...

With the EASY MENU, items shown in the table below can be performed.

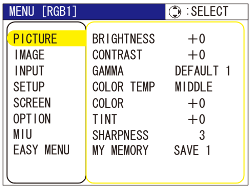
Select an item using the cursor buttons ▲/▼ on the projector or remote control. Then perform it referring to the following table.

Item	Description
ASPECT	Using the buttons ◀/▶ switches the mode for aspect ratio. See the ASPECT item in the IMAGE menu (📖*32*).
AUTO KEYSTONE EXECUTE	Using the button ▶ executes the auto keystone function. See the AUTO KEYSTONE EXECUTE item in the SETUP menu (📖*37*). This function will be unavailable when Transition Detector is on (📖*50*).
KEYSTONE	Using the buttons ◀/▶ corrects the keystone distortion. See the item KEYSTONE of section SETUP menu. (📖*37*) This function will be unavailable when Transition Detector is on (📖*50*).
PICTURE MODE	Using the buttons ◀/▶ switches the mode of picture type. The modes of picture type are combinations of a mode of GAMMA and a mode of COLOR TEMP. Choose a suitable mode according to the projected source. ⇨ NORMAL ⇔ CINEMA ⇔ DYNAMIC ⇦ ⇨ WHITEBOARD ⇔ BOARD(GREEN) ⇔ BOARD(BLACK) ⇦ NORMAL: (COLOR TEMP = MID DEFAULT) + (GAMMA = #1 DEFAULT) CINEMA: (COLOR TEMP = LOW DEFAULT) + (GAMMA = #2 DEFAULT) DYNAMIC: (COLOR TEMP = HIGH DEFAULT) + (GAMMA = #3 DEFAULT) BOARD(BLACK): (COLOR TEMP = Hi-BRIGHT-1 DEFAULT) + (GAMMA = #4 DEFAULT) BOARD(GREEN): (COLOR TEMP = Hi-BRIGHT-2 DEFAULT) + (GAMMA = #4 DEFAULT) WHITEBOARD: (COLOR TEMP = MID DEFAULT) + (GAMMA = #5 DEFAULT) • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the PICTURE MODE is “CUSTOM”. Please refer to the GAMMA (📖*29*) and COLOR TEMP (📖*30*) items in the PICTURE menu. • When this function is performed, a certain extra such as a line may appear.
BRIGHTNESS	Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHTNESS in the PICTURE menu (📖*29*).

EASY Menu (continued)

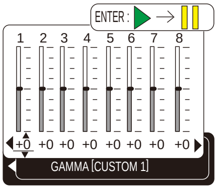
Item	Description
CONTRAST	Using the buttons ◄/► adjusts the contrast. See the CONTRAST item in the PICTURE menu (📖*29*).
COLOR	Using the buttons ◄/► adjusts the strength of whole color. See the COLOR item in the PICTURE menu (📖*30*).
TINT	Using the buttons ◄/► adjusts the tint. See the TINT item in the PICTURE menu (📖*30*).
SHARPNESS	Using the buttons ◄/► adjusts the sharpness. See the SHARPNESS item in the PICTURE menu (📖*30*). • There may be some noise when an adjustment is made. This is not a malfunction.
WHISPER	Using the buttons ◄/► turns off/on the whisper mode. See the WHISPER item in the SETUP menu (📖*37*).
MIRROR	Using the buttons ◄/► switches the mode for mirror status. See the MIRROR item in the SETUP menu (📖*38*). If Transition Detector is TURN ON and MIRROR status is changed, Transition Detector Alarm (📖*50*) will be displayed when projector is restarted after the power switch is turned off.
RESET	Performing this item resets all of the items of EASY MENU except FILTER TIME and LANGUAGE. A dialog is displayed for confirmation. Selecting RESET using the button ▲ performs resetting.
FILTER TIME	Performing this item resets the filter timer which counts usage time of the air filter. A dialog is displayed for confirmation. Selecting RESET using the button ▲ performs resetting. See the FILTER TIME item in the OPTION menu (📖*43*).
LANGUAGE	Using the buttons ◄/► selects the LANGUAGE item to toggle the menu language. Refer to description of LANGUAGE in the SCREEN menu (📖*39*). ~Note~ When PC-LESS presentation or e-SHOT is being used, the language is not likely to be changed correctly.
Go to Advanced Menu	Select “Go to Advanced Menu” and press the button ► or the ENTER button to use the menu of PICTURE, IMAGE, INPUT, SETUP, SCREEN, OPTION or MIU.

PICTURE Menu

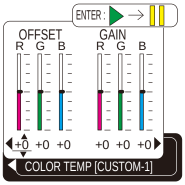

MENU [RGB1]
:SELECT
PICTURE
IMAGE
INPUT
SETUP
SCREEN
OPTION
MIU
EASY MENU
BRIGHTNESS +0
CONTRAST +0
GAMMA DEFAULT 1
COLOR TEMP MIDDLE
COLOR +0
TINT +0
SHARPNESS 3
MY MEMORY SAVE 1

With the PICTURE menu, the items shown in the table below can be performed.

Select an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to execute the item. Then perform it referring to the following table.

Item	Description
BRIGHTNESS	Using the buttons ▲/▼ adjusts the brightness. : Light ⇔ Dark
CONTRAST	Using the buttons ▲/▼ adjusts the contrast. : Strong ⇔ Weak
GAMMA	Using the buttons ▲/▼ switches the GAMMA mode. #1 DEFAULT ⇔#1 CUSTOM ⇔ #2 DEFAULT ⇔ #2 CUSTOM ⇔ #3 DEFAULT ⇕ ⇕ #5 CUSTOM ⇔ #5 DEFAULT ⇔ #4 CUSTOM ⇔ #4 DEFAULT ⇔ #3 CUSTOM **To adjust CUSTOM**  ENTER : → 1 2 3 4 5 6 7 8 +0 +0 +0 +0 +0 +0 +0 +0 GAMMA [CUSTOM 1] Selecting a mode of CUSTOM and then pressing the button ► or the ENTER button displays a dialog to aid you in adjusting the mode. This function is useful when you want to change the brightness of particular tones. Choose an item using the buttons ◄/►, and adjust the level using the buttons ▲/▼. You can display a test pattern for checking the effect of your adjustment by pressing the ENTER button. Each time you press the ENTER button, the pattern changes as below. No pattern ⇨ Gray scale of 9 steps ⇩ ⇧ Ramp ⇦ Gray scale of 15 steps The eight equalizing bars correspond to eight tone levels of the test pattern except the darkest in the left end. If you want to adjust the 2nd tone from left end on the test pattern (Gray scale of 9 steps), use the equalizing adjustment bar “1”. The darkest tone at the left end of the test pattern cannot be controlled with any of equalizing adjustment bar. • When this function is performed, a certain extra such as a line may appear.

PICTURE Menu (continued)

Item	Description
COLOR TEMP	Using the buttons ▲/▼ switches the mode of color temperature. HIGH DEFAULT ⇔ HIGH CUSTOM ⇔ MID DEFAULT ⇔ MID CUSTOM LOW DEFAULT ⇔ LOW CUSTOM ⇔ Hi-BRIGHT-1 DEFAULT ⇔ Hi-BRIGHT-1 CUSTOM Hi-BRIGHT-2 DEFAULT ⇔ Hi-BRIGHT-2 CUSTOM **To adjust CUSTOM** Selecting the CUSTOM and then pressing the button ► or the ENTER button displays a dialog to aid you in adjusting the OFFSET and/or GAIN of the CUSTOM mode.  ENTER : OFFSET GAIN R G B R G B +0 +0 +0 +0 +0 +0 COLOR TEMP [CUSTOM-1] OFFSET adjustments change the color intensity on the whole tones of the test pattern. GAIN adjustments mainly affect color intensity on the brighter tones of the test pattern. Choose an item using the buttons ◄/►, and adjust the level using the buttons ▲/▼. You can display a test pattern for checking the effect of your adjustment by pressing the ENTER button. Each time you press the ENTER button, the pattern changes as below. No pattern ⇨ Gray scale of 9 steps Ramp ⇦ Gray scale of 15 steps • When this function is performed, a certain extra such as a line may appear.
COLOR	Using the buttons ▲/▼ adjusts the strength of whole color. Strong ⇔ Weak • This item can be selected only for a video signal, s-video or component video signal.
TINT	Using the buttons ▲/▼ adjusts the tint. Greenish ⇔ Reddish • This item can be selected only for a video signal, s-video or component video signal.
SHARPNESS	Using the buttons ▲/▼ adjusts the sharpness. Strong ⇔ Weak • There may be some noise and/or the screen may flicker for a moment when an adjustment is made. This is not a malfunction.

PICTURE Menu (continued)

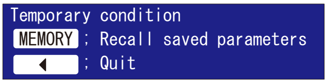
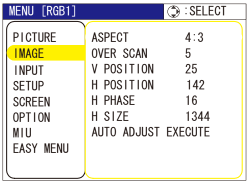
Item	Description
MY MEMORY	Selecting a mode of MY MEMORY using the buttons ▲/▼ and then pressing the button ► or the ENTER button performs each function. LOAD1 ⇔ LOAD2 ⇔ LOAD3 ⇔ LOAD4 SAVE4 ⇔ SAVE3 ⇔ SAVE2 ⇔ SAVE1 This projector has 4 numbered memories for adjustment data. Performing the LOAD1, LOAD2, LOAD3 or LOAD4 loads the data on the memory whose number corresponds to the command's number, and adjusts the picture automatically depending on the data. Performing the SAVE1, SAVE2, SAVE3 or SAVE4 saves the current adjustment data on the memory whose number corresponds to the command's number. • The current adjustment data of the items in the PICTURE menu is stored. • There may be some noise and/or the screen may flicker for a moment when data is loaded to memory. This is not a malfunction. When the current settings are not saved to memory the following dialog is displayed.  Temporary condition MEMORY ; Recall saved parameters ◄ ; Quit To load saved adjustment settings press the MY BUTTON button. When there are no saved adjustment settings the following dialog is displayed. No saved data ~Note~ You have to assign the MY MEMORY function to the MY BUTTON (📖*43*).

IMAGE Menu

With the IMAGE menu, items shown in the table below can be performed.

Select an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ▶ on the projector or remote control, or the ENTER button on the remote control to execute the item. Then perform it referring to the following table.



ASPECT 4:3
OVER SCAN 5
V POSITION 25
H POSITION 142
H PHASE 16
H SIZE 1344
AUTO ADJUST EXECUTE

Item	Description
ASPECT	Using the buttons ▲/▼ switches the mode for aspect ratio. **For an RGB and MIU signal** NORMAL ⇔ 4:3 ⇔ 16:9 ⇔ SMALL **For a video signal, s-video signal or component video signal** 4:3 ⇔ 16:9 ⇔ 14:9 ⇔ SMALL **For a no signal** 4:3 (fixed) • The NORMAL mode keeps the original aspect ratio of the signal.
OVER SCAN	Using the buttons ▲/▼ adjusts the over-scan ratio. Large (It reduces picture) ⇔ Small (It magnifies picture) • This item can be selected only for a video, s-video and component signal. • When this adjustment is too large, certain degradation may appear at the frame area of the picture. In such a case, please adjust small.
V POSITION	Using the buttons ▲/▼ adjusts the vertical position. Up ⇔ Down • Over-adjusting the vertical position may cause noise to appear on the screen. If this occurs please reset the vertical position to the default setting. Pressing the RESET button when V POSITION is selected will reset the V POSITION to the default setting. **For a video signal, s-video signal or component video signal** The adjustable range of V.POSITION depends on the OVERSCAN setting. It is not possible to adjust when the OVERSCAN is set to 10.
H POSITION	Using the buttons ▲/▼ adjusts the horizontal position. Left ⇔ Right • Over-adjusting the horizontal position may cause noise to appear on the screen. If this occurs please reset the horizontal position to the default setting. Pressing the RESET button when H POSITION is selected will reset the H POSITION to the default setting. **For a video signal, s-video signal or component video signal** The adjustable range of H.POSITION depends on the OVERSCAN setting. It is not possible to adjust when the OVERSCAN is set to 10.
H PHASE	Using the buttons ▲/▼ adjusts the horizontal phase to eliminate flicker. Right ⇔ Left • This item can be selected only for an RGB signal or a component video signal.

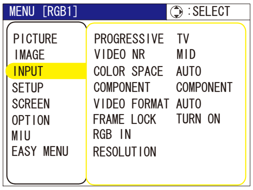
IMAGE Menu (continued)

Item	Description
H SIZE	Using the buttons ▲/▼ adjusts the horizontal size. Large ⇔ Small • This item can be selected only for an RGB signal. • When this adjustment is excessive, the picture may not be displayed correctly. In such a case, please reset the adjustment by pressing the RESET button on the remote control during this operation.
AUTO ADJUST EXECUTE	Selecting this item performs the automatic adjustment feature. **For an RGB signal** The vertical position, the horizontal position, the horizontal phase and the horizontal size will be automatically set to default. And the aspect ratio will be automatically selected. Make sure that the application window is set to its maximum size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting. **For a video signal or s-video signal** The video format best suited for the respective input signal will be selected automatically. This function is available only when the AUTO mode is selected to the VIDEO FORMAT item in the INPUT menu. For a component video signal, the signal type is identified automatically independently of this function. **For a video signal, s-video signal or component video signal** The vertical position, horizontal position and aspect ratio will be automatically set to default. **For a component video signal** The horizontal phase will be automatically set to default. • The automatic adjustment operation requires about 10 seconds. Also please note that it may not function correctly with some input.

INPUT Menu

With the INPUT menu, the items shown in the table below can be performed.

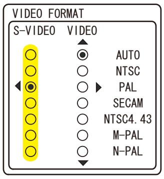
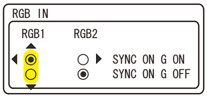
Select an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to execute the item. Then perform it referring to the following table.



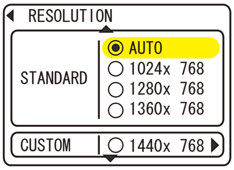
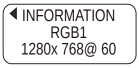
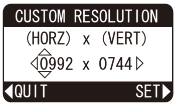
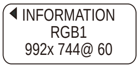
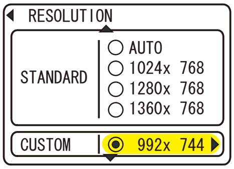
PROGRESSIVE	TV
VIDEO NR	MID
COLOR SPACE	AUTO
COMPONENT	COMPONENT
VIDEO FORMAT	AUTO
FRAME LOCK	TURN ON
RGB IN	
RESOLUTION	

Item	Description
PROGRESSIVE	Using the buttons ▲/▼ switches the progress mode. TV ⇔ FILM ⇔ TURN OFF • This function is performed only for an interlaced signal of a VIDEO input, an S-VIDEO input or COMPONENT VIDEO input of 525i (480i) or 625i (576i) signal. • When TV or FILM is selected, the screen image will be sharp. FILM adapts to the 2-3 Pull-Down conversion system. But these may cause a certain defect (for example, jagged line) of the picture for a quick moving object. In such a case, please select TURN OFF, even though the screen image may lose the sharpness.
VIDEO NR	Using the buttons ▲/▼ switches the noise reduction mode. HIGH ⇔ MID ⇔ LOW • This function performs only at a VIDEO input, an S-VIDEO or COMPONENT VIDEO input of 525i(480i) or 625i(576i) signal. • When this function is excessive, it may cause a certain degradation of the picture.
COLOR SPACE	Using the buttons ▲/▼ switches the mode for color space. AUTO ⇔ RGB ⇔ SMPTE240 ⇔ REC709 ⇔ REC601 • This item can be selected only for an RGB signal or a component video signal (except signals of SCART RGB from the component video port). • The AUTO mode automatically selects the optimum mode. • The AUTO operation may not work well at some signals. In such a case, it might be good to select a suitable mode except AUTO.

INPUT Menu (continued)

Item	Description
COMPONENT	Using the buttons ▲/▼ switches the function of COMPONENT VIDEO port. COMPONENT ⇔ SCART RGB When the SCART RGB is selected, the COMPONENT VIDEO port function as a port for a SCART RGB signal input and VIDEO port function as a port for SCART RGB sync input. A SCART adapter and SCART cable realize a SCART RGB input to the projector. For details, contact your dealer.
VIDEO FORMAT	Set the video format for the s-video port and video port. (1) Use the ◄/► buttons to select the input port.  VIDEO FORMAT S-VIDEO VIDEO AUTO NTSC PAL SECAM NTSC4.43 M-PAL N-PAL (2) Using the buttons ▲/▼ switches the mode for video format. AUTO ⇔ NTSC ⇔ PAL ⇔ SECAM ↳ N-PAL ⇔ M-PAL ⇔ NTSC4.43 ⮤ • This item is performed only for a video signal from the VIDEO port or the S-VIDEO port. • The AUTO mode automatically selects the optimum mode. • The AUTO operation may not work well for some signals. If the picture becomes unstable (ex. an irregular picture, a color lack), please select the mode depending on the input signal.
FRAME LOCK	Using the buttons ▲/▼ turns the frame lock function on/off. TURN ON ⇔ TURN OFF • This item performs only at a RGB signal with vertical frequency of 50 to 60 Hz. • When the TURN ON is selected, a moving picture is displayed more smoothly. • This function may cause a certain degradation of the picture. In such a case, please select the TURN OFF.
RGB IN	Set the RGB input signal type for the RGB port. (1) Use the ◄/► buttons to select the RGB port to be set.  RGB1 ⇔ RGB2 (2) Use the ▲/▼ buttons to select the RGB input signal type. SYNC ON G ON ⇔ SYNC ON G OFF • Selecting TURN ON turns on the SYNC ON G mode. The SYNC ON G mode allows reception of SYNC ON G. • In the SYNC ON G mode, the picture may be distorted with certain input signals. In such a case, remove the signal connector so that no signal is received and turn SYNC ON G off, and then reconnect the signal.

INPUT Menu (continued)

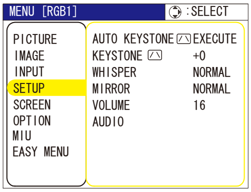
Item	Description
RESOLUTION ***2**	The resolution for the RGB1 and RGB2 input signals can be set on this projector. (1) In the INPUT menu select RESOLUTION using the ▲/▼ buttons and press the ► button. The RESOLUTION menu will be displayed.  RESOLUTION STANDARD ◉ AUTO ○ 1024x 768 ○ 1280x 768 ○ 1360x 768 CUSTOM ○ 1440x 768 RESOLUTION MENU (2) In the RESOLUTION menu select the resolution you wish to display using the ▲/▼ buttons. Selecting AUTO will set a resolution appropriate to the input signal. (3) Pressing the ► or Enter button when selecting a STANDARD resolution will automatically adjust the horizontal and vertical positions, clock phase and horizontal size and automatically select an aspect ratio. The INFORMATION dialog (📖*45*) will be displayed.  INFORMATION RGB1 1280x 768@ 60 (4) To set a custom resolution use the ▲/▼ buttons to select CUSTOM and the CUSTOM RESOLUTION BOX will be displayed. Set the horizontal (HORZ) and vertical (VERT) resolutions using the ▲/▼/◄/► buttons. *1  CUSTOM RESOLUTION (HORZ) x (VERT) 0992 x 0744 CUSTOM RESOLUTION BOX (5) To save the setting place the cursor on the right-most digit and press the ► button. The horizontal and vertical positions, clock phase and horizontal size will be automatically adjusted and an aspect ratio will be automatically selected. After the INFORMATION(📖*45*) dialog has displayed for about 10 seconds the screen will return to the RESOLUTION menu displaying the changed resolution.  INFORMATION RGB1 992x 744@ 60  RESOLUTION STANDARD ○ AUTO ○ 1024x 768 ○ 1280x 768 ○ 1360x 768 CUSTOM ◉ 992x 744 (6) To revert back to the previous resolution without saving changes place the cursor on the left-most digit and press the ◄ button. The screen will then return to the RESOLUTION menu displaying the previous resolution.

*1 Not all resolutions are guaranteed.
*2 For some pictures, this function may not work well.

SETUP Menu

With the SETUP menu, the items shown in the table below can be performed.

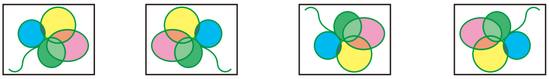
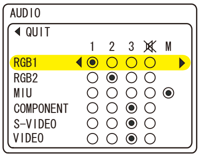
Select an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to execute the item. Then perform it referring to the following table.



AUTO KEYSTONE EXECUTE
KEYSTONE +0
WHISPER NORMAL
MIRROR NORMAL
VOLUME 16
AUDIO

Item	Description
AUTO KEYSTONE EXECUTE	Selecting this item performs the Automatic keystone distortion correction. Projector automatically corrects vertical keystone distortion due to the (forward/backward) setup angle by itself. • This function will be executed only once when selected in the Menu. When the slant of the projector is changed, executes this function again. • When V:INVERT or H&V:INVERT is selected to the MIRROR item in the SETUP menu, if the projector screen is inclined or angled downward, this function may not work correctly. • When the zoom adjustment is set to the TELE (telephoto focus), this correction may be excessive. This function should be used when the zoom adjustment is set to the WIDE (wide-angle focus) whenever possible. • When vertical degree is almost 0 degree, the automatic keystone distortion correction may not work. • When vertical degree is over ±30 degree, the automatic keystone distortion correction may not work well. • This function will be unavailable when Transition Detector is on (📖*50*).
KEYSTONE	Using the buttons ▲/▼ corrects the keystone distortion. Upper in the data ⇔ Lower in the data • The adjustable range of this function will vary with the type of input signal. At some signals, this function may not work well. • This function will be unavailable when Transition Detector is on (📖*50*).
WHISPER	Using the buttons ▲/▼ turns off/on the whisper mode. NORMAL ⇔ WHISPER • When the WHISPER is selected, acoustic noise and screen brightness are reduced.

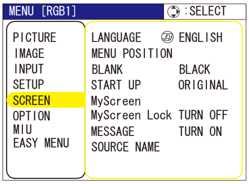
SETUP Menu (continued)

Item	Description
MIRROR	Using the buttons ▲/▼ switches the mode for mirror status.  NORMAL ⇔ H:INVERT ⇔ V:INVERT ⇔ H&V:INVERT If Transition Detector is TURN ON and MIRROR status is changed, Transition Detector Alarm (📖*50*) will be displayed when projector is restarted after the power switch is turned off.
VOLUME	Using the buttons ▲/▼ adjusts the volume. High ⇔ Low
AUDIO	Allocates the audio ports. Choose a picture input port using the buttons ▲/▼ (1), then select the audio port to be interlocked with the input port using the buttons ◄/► (2). When off is selected, all audio ports do not work for the input port.  AUDIO ◀ QUIT 1 2 3 🔇 M RGB1 ◀ ◉ ○ ○ ○ ▶ RGB2 ○ ◉ ○ ○ MIU ○ ○ ○ ○ ◉ COMPONENT ○ ○ ◉ ○ S-VIDEO ○ ○ ◉ ○ VIDEO ○ ○ ◉ ○ (1) RGB1 ⇔ RGB2 ⇔ MIU ⇔ COMPONENT ⇔ S-VIDEO ⇔ VIDEO (2) 1 ⇔ 2 ⇔ 3 ⇔ 🔇 ⇔ M M is abbreviation of MIU.

SCREEN Menu

With the SCREEN menu, the items shown in the table below can be performed.

Select an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to execute the item. Then perform it referring to the following table.



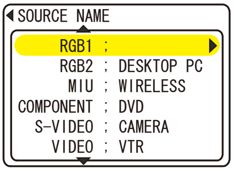
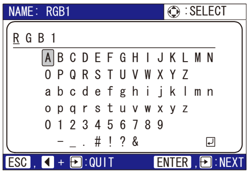
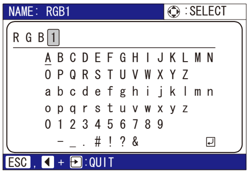
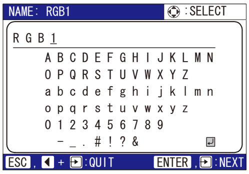
LANGUAGE ENGLISH
MENU POSITION
BLANK BLACK
START UP ORIGINAL
MyScreen
MyScreen Lock TURN OFF
MESSAGE TURN ON
SOURCE NAME

Item	Description
LANGUAGE	Using the buttons ▲/▼ switches the OSD (On Screen Display) language. ENGLISH ⇔ FRANÇAIS ⇔ DEUTSCH ⇔ ESPAÑOL ⇔ ITALIANO NORSK ⇔ NEDERLANDS ⇔ PORTUGUÊS ⇔ 日本語 简体中文⇔繁體中文⇔한글⇔ SVENSKA ⇔ PYCCKИЙ SUOMI ⇔ POLSKI ⇔ TÜRKÇE
MENU POSITION	Using the buttons ◄/►/▲/▼ adjusts the menu position. To quit the operation, press the MENU button on the remote control or keep no operation for about 10 seconds.
BLANK	Using the buttons ▲/▼ switches the mode for the blank screen. The blank screen is a screen for the temporarily blanking feature (📖*24*). It is displayed by pressing the BLANK button on the remote control. MyScreen ⇔ ORIGINAL ⇔ BLUE ⇔ WHITE ⇔ BLACK MyScreen is a screen you can register as a desired screen. The ORIGINAL screen is the existing standard screen. BLUE, WHITE and BLACK are non-patterned (plain) screens in each color. • To avoid remaining as an afterimage, the MyScreen and the ORIGINAL screens will change to the BLACK screen after several minutes. • For the MyScreen, please refer to the MyScreen item (📖*40*).

SCREEN Menu (continued)

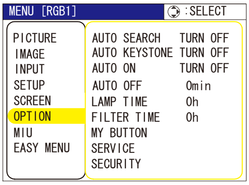
Item	Description
START UP	Using the buttons ▲/▼ switches the mode for the start-up screen. The start-up screen is a screen displayed when no signal or an unsuitable signal is detected. MyScreen ⇔ ORIGINAL ⇔ TURN OFF MyScreen is a screen you can register as a desired screen.The ORIGINAL screen is the existing standard screen. When TURN OFF is selected, the BLACK screen is used. • To avoid remaining as an afterimage, the MyScreen and the ORIGINAL screens will change to the BLANK screen after several minutes. If also the BLANK screen is the MyScreen or ORIGINAL, it will change to the BLACK screen. • For the MyScreen, please refer to the item MyScreen below. For the BLANK screen, please refer to the BLANK item (📖*39*). • This function will be unavailable and fixed to Myscreen when MyScreen Password in the Security Menu is on.
MyScreen	This item functions for capturing the MyScreen of the blank screen and the start-up screen. Please execute displaying the input including the picture you want to capture. 1. Selecting this item displays a dialog titled “MyScreen”. It will ask you if you start capturing the picture from the current screen. Please wait for the target picture to be displayed, and press the ENTER button on the remote control when the picture is displayed. The picture will freeze and the frame for capturing appears. To stop performing, press the RESET or ESC button on the remote control. 2. Using the buttons ◄/►/▲/▼ adjusts the frame position. Please move the frame to the position of the picture which you want to use. The frame may not be able to be moved for some input signals. To start registration, press the ENTER button on the remote control. To restore the screen and return to the previous dialog, press the RESET or ESC button on the remote control. Registration takes several minutes. When the registration is completed, the registered screen and the message “MyScreen registration is finished.” are displayed for several seconds. If the registration failed, the message “A capturing error has occurred. Please try again.” is displayed. • This function will be unavailable when MyScreen Password in the Security Menu is on. NOTE : The KEYSTONE cannot be adjusted while using the MyScreen function.
MyScreen Lock	Using the buttons ▲/▼ turns on/off the MyScreen lock function. TURN ON ⇔ TURN OFF When the TURN ON is selected, the item MyScreen is locked. Use this function for protecting the current MyScreen. • This function will be unavailable when MyScreen Password in the Security Menu is on.

SCREEN Menu (continued)

Item	Description
MESSAGE	Using the buttons ▲/▼ turns on/off the message function. TURN ON ⇔ TURN OFF When the TURN ON is selected, the following message function works. "AUTO IN PROGRESS" while automatically adjusting "NO INPUT IS DETECTED" "SYNC IS OUT OF RANGE" "Searching…." while searching for the input "Detecting…." while an input signal is detected The indication of the input signal displayed by changing The indication of the aspect ration displayed by changing The indication of the My Memory displayed by changing The indication of the Picture Mode displayed by changing The indication of "FREEZE" and "II" while freezing the screen by pressing the FREEZE button. • When the TURN OFF is selected, please remember if the picture is freezing. Do not mistake freezing for a malfunction (📖*24*).
SOURCE NAME	Each input port for this projector can have a name applied to it. (1) Use the ▲/▼ buttons on the SCREEN menu to select SOURCE NAME and press the ► button. The SOURCE NAME menu will be displayed.  SOURCE NAME RGB1 : RGB2 : DESKTOP PC MIU : WIRELESS COMPONENT : DVD S-VIDEO : CAMERA VIDEO : VTR SOURCE NAME MENU *Right side of the menu is blank until a name is specified (2) Use the ▲/▼ buttons on the SOURCE NAME menu to select the port to be named and press the ► button. The SOURCE NAME dialog will be displayed. (3) The current name will be displayed on the first line. Use the ◄/►/▲/▼ and ENTER or INPUT buttons to select and enter characters. The RESET button can be used to erase 1 character at a time. The name can be a maximum of 16 characters.  NAME: RGB1 :SELECT R G B 1 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z 0 1 2 3 4 5 6 7 8 9 - _ . # ! ? & ESC , ◄ + :QUIT ENTER , :NEXT (4) To change an already inserted character, press the ▲ button while the cursor is on the [A-N] row to move the cursor to the name displayed on the first line and use the ◄/► buttons to select character to be changed. Once a character in the name is selected use the ▼ button to move the cursor back down to the character entry area to select and enter characters as described above.  NAME: RGB1 :SELECT R G B 1 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z 0 1 2 3 4 5 6 7 8 9 - _ . # ! ? & ESC , ◄ + :QUIT (5) Select ↲ and press the ENTER or INPUT buttons when finished entering text. To revert to the previous name without saving changes press the ESC or ◄ button and the INPUT button simultaneously.  NAME: RGB1 :SELECT R G B 1 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z 0 1 2 3 4 5 6 7 8 9 - _ . # ! ? & ESC , ◄ + :QUIT ENTER , :NEXT

OPTION Menu

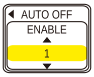
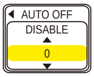
With the OPTION menu, the items shown in the table below can be performed.
Select an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to execute the item, except for the items LAMP TIME and FILTER TIME. Then perform it referring to the following table.



AUTO SEARCH TURN OFF
AUTO KEYSTONE TURN OFF
AUTO ON TURN OFF
AUTO OFF 0min
LAMP TIME 0h
FILTER TIME 0h
MY BUTTON
SERVICE
SECURITY

Item	Description
AUTO SEARCH	Using the buttons ▲/▼ turns on/off the automatic signal search function. TURN ON ⇔ TURN OFF When the TURN ON is selected, detecting no signal automatically cycles through input ports in the following order. The search is started from the current port. Then when an input is found, the projector will stop searching and display the image. RGB IN1 ⇨ RGB IN2 ⇨ MIU ⇨ COMPONENT VIDEO ⇨ S-VIDEO ⇨ VIDEO ⇧
AUTO KEYSTONE	Using the buttons ▲/▼ turns on/off the automatic keystone function. TURN ON ⇔ TURN OFF TURN ON : Automatic keystone distortion correction will be executed whenever changing the slant of the projector. TURN OFF : This function is disabled. Please execute the AUTO KEYSTONE EXECUTE in the SETUP Menu for automatic keystone distortion correction. When the projector is suspended from the ceiling this feature will not function properly so select TURN OFF. This function will be unavailable when Transition Detector is on (📖*50*).
AUTO ON	Using the buttons ▲/▼ turns on/off the AUTO ON function. TURN ON ⇔ TURN OFF When set to TURN ON, the lamp will only be automatically turned on when the Power switch is turned on after the power was turned off by Power switch last time. The lamp will not be automatically turned on when the Power switch is turned on if the lamp was turned off with the following procedures. • The lamp was turned off with a remote control, projector button, or power turn off command. • The lamp was turned off with an AUTO OFF function (📖*43*). • The lamp was turned on by an AUTO ON function and was turned off about 30 minutes after no signal had been detected. When no input is detected after the power on and AUTO OFF time is set to 0, the projector will be turned off after about 30 minutes passed. When no input is detected after the power on and AUTO OFF time is set to 1 to 99, the projector will be turned off after the passed time reaches at the set time. If one of the projector's buttons or the remote control buttons is pressed or one of the commands (except get commands) is transmitted from the control port during the corresponding time, projector will not be turned off.

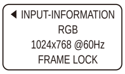
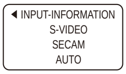
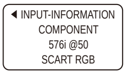
OPTION Menu (continued)

Item	Description
AUTO OFF	Using the buttons ▲/▼ adjusts the time to count down to automatically turn the projector off. Long (max. 99 minutes) ⇔ Short (min. 0 minute = DISABLE)   When the time is set to 0, the projector is not turned off automatically. When the time is set to 1 to 99, and when the passed time with no-signal or an unsuitable signal reaches at the set time, the projector lamp will be turned off. If one of the projector's buttons or the remote control buttons is pressed or one of the commands (except get commands) is transmitted to the control port during the corresponding time, projector will not be turned off. Please refer to the section “Turning off the power” (📖*19*).
LAMP TIME	The lamp time is the time counted after the last resetting. It is shown in the OPTION menu as the usage time of the lamp. Pressing the RESET button on the remote control or the button ► of the projector displays a dialog. To reset the lamp time, select the RESET using the button ▲. RESET ⇦ CANCEL • Please reset the lamp time only when you have replaced the lamp, for a suitable indication about the lamp. • For the lamp replacement, see the section "Lamp" (📖*57, 58*).
FILTER TIME	The filter time is the time counted after the last resetting. It is shown in the OPTION menu as the usage time of the air filter. Pressing the RESET button on the remote control or the button ► of the projector displays a dialog. To reset the filter time, select the RESET using the button ▲. RESET ⇦ CANCEL • Please reset the filter time only when you have cleaned or replaced the air filter, for a suitable indication about the air filter. • For the air filter cleaning, see the section "Air filter" (📖*59, 60*).
MY BUTTON	Sets the assigned function for the MY BUTTON1 and 2 buttons on the included remote control. • RGB1: Sets port to RGB1. • RGB2: Sets port to RGB2. • MIU: Sets port to MIU. • COMPONENT: Sets port to COMPONENT. • S-VIDEO: Sets port to S-VIDEO. • VIDEO: Sets port to VIDEO. • e-SHOT: Displays the e-SHOT menu (📖*53*). • INFORMATION: Displays INPUT INFORMATION (📖*45*). • AUTO KEYSTONE EXECUTE: Performs automatic KEYSTONE correction (📖*37*). • MY MEMORY: Loads MY MEMORY settings (📖*31*). • PICTURE MODE: Changes the PICTURE mode (📖*27*). • FILTER RESET: Displays the filter time reset confirmation dialogue (📖*43*). • VOLUME+: Sets the volume up. • VOLUME–: Sets the volume down.

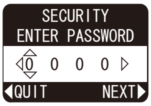
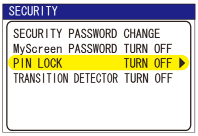
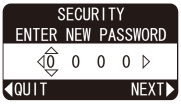
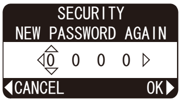
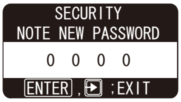
OPTION Menu (continued)

Item	Description
SERVICE	Selecting this item displays the SERVICE menu. Select an item using the buttons ▲/▼, and press the button ► or the ENTER button on the remote control to execute the item. FAN SPEED ⇔ AUTO ADJUST ⇔ GHOST ⇔ FILTER MESSAGE ⇔ KEY LOCK ⇔ FACTORY RESET ⇔ INFORMATION ⇔ REMOTE FREQ. ⇔ **FAN SPEED** Using the buttons ▲/▼ switches the rotation speed of the cooling fans. The HIGH is the mode for use at highlands etc. Note that the projector is noisier when the HIGH is selected. HIGH ⇔ NORMAL **AUTO ADJUST** Using the buttons ▲/▼ enables/disables the automatic adjustment. When DISABLE is selected, the automatic adjustment feature is disabled, although rough adjustment is automatically performed depending on the basic setting. ENABLE ⇔ DISABLE • Depending on conditions, such as input image, signal cable to the projector, environment around the projector, etc., the automatic adjustment may not work correctly. In such a case, please choose DISABLE to disable the automatic adjustment, and make adjustment manually. **GHOST** 1. Select a color element of ghost using the buttons ◄/►. 2. Adjust the selected element using the buttons ▲/▼ to disappear ghost. **FILTER MESSAGE** Use the ▲/▼ button to set the timer for the interval to show the message for cleaning up the air filter. 50h ⇔ 100h ⇔ 200h ⇔ 300h ⇔ TURN OFF After selecting “50h”, “100h”, “200h”, or “300h”, the message “REMINDER *** HRS PASSED AFTER THE LAST FILTER CHECK” will appear after the timer reaches the interval time set by the menu. (📖*63*) When the “TURN OFF” is chosen, the air filter cleaning message will not appear. • Please check and clean the air filter periodically, even if there is no message. If the air filter becomes to be blocked by dust or others, the internal temperature will rise, which could cause malfunction, or reduce the lifetime of the projector. • It is recommended to choose “100h” in general. Please be careful with the operating environment of the projector and the condition of the air filter, especially when the “200h”, “300h” or “TURN OFF” is chosen. **KEY LOCK** Using the buttons ▲/▼ turns on/off the key lock feature. When TURN ON is selected, the buttons on the projector except the STANDBY/ON button are locked. TURN ON ⇔ TURN OFF • Please use to avoid a mischief and touching accidentally. This function does not have any effect on the remote control.

OPTION Menu (continued)

Item	Description
SERVICE	**REMOTE FREQ.** Use the ▲/▼ button to change the Projector's remote sensor setting (📖*18*). 1:NORMAL ⇔ 2:HIGH Items with a checkmark are on. The factory default setting is for both 1:NORMAL and 2:HIGH to be on. If the remote control does not function correctly set the this to either only 1 or only 2 as described in Remote Control Settings (📖*18*). Neither can be turned off at the same time. **INFORMATION** Selecting this item displays a dialog titled “INPUT INFORMATION”. It shows the information about the current input.  ◄ INPUT-INFORMATION RGB 1024x768 @60Hz FRAME LOCK  ◄ INPUT-INFORMATION S-VIDEO SECAM AUTO  ◄ INPUT-INFORMATION COMPONENT 576i @50 SCART RGB • The “FRAME LOCK” message on the dialog means the frame lock function is working. • The “SCART RGB” message means the COMPONENT VIDEO port is working as a SCART RGB input port. Please refer to the COMPONENT item in INPUT menu. (📖*35*) • This item can't be selected for no signal and sync out. **FACTORY RESET** Selecting RESET using the button ▲ performs this function. By this function, all the items in all of menus will collectively return to the initial setting. Note that the items LAMP TIME, FILTER TIME, LANGUAGE and SECURITY are not reset. RESET ⇦ CANCEL

OPTION Menu (continued)

Item	Description
SECURITY	This projector is equipped with security functions. User registration is required before using the security functions. Please contact your local dealer. **1. Using Security Features** **1.1 Inputting the PASSWORD** 1.1-1 Use the ▲/▼ buttons on the OPTION menu to select SECURITY and press the ► button. The ENTER PASSWORD box will be displayed. The factory default PASSWORD is 3046. This PASSWORD can be changed (1.2 Changing the PASSWORD).  ENTER PASSWORD BOX **NOTE** : It is strongly recommended the factory default PASSWORD to be changed as soon as possible.  SECURITY PASSWORD CHANGE MyScreen PASSWORD TURN OFF PIN LOCK TURN OFF TRANSITION DETECTOR TURN OFF SECURITY MENU 1.1-2 Use the ▲/▼/◄/► buttons to enter the registered PASSWORD. Move the cursor to the right side of the ENTER PASSWORD BOX and press the ► button to display the SECURITY menu. If an incorrect PASSWORD is input the ENTER PASSWORD BOX will be displayed again. If incorrect PASSWORD is input 3 times the projector will turn off. Afterwards the projector will turn off every time an incorrect PASSWORD is input. **1.2 Changing the PASSWORD** 1.2-1 Use the ▲/▼ buttons on the SECURITY menu to select SECURITY PASSWORD CHANGE and press the ► button to display the ENTER NEW PASSWORD BOX.  ENTER NEW PASSWORD BOX 1.2-2 Use the ▲/▼/◄/► buttons to enter the new PASSWORD. 1.2-3 Move the cursor to the right side of the ENTER NEW PASSWORD BOX and press the ► button to display the NEW PASSWORD AGAIN BOX, enter the same PASSWORD again.  NEW PASSWORD AGAIN BOX 1.2-4 Move the cursor to the right side of the NEW PASSWORD AGAIN BOX and press the ► button and the NOTE NEW PASSWORD BOX will be displayed for about 20 seconds, please make note of the PASSWORD during this time. Pressing the ENTER button on the remote control or INPUT button on the projector will close the NOTE NEW PASSWORD BOX.  NOTE NEW PASSWORD BOX **NOTE** : Please do not forget your PASSWORD.

OPTION Menu (continued)

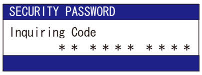
Item	Description
SECURITY	See below

SECURITY

1.3 If you have forgotten your PASSWORD

1.3-1 Follow the procedure in 1.1-1 to display the ENTER PASSWORD BOX.

1.3-2 While the ENTER PASSWORD BOX is displayed, press and hold the RESET button on the remote control for about 3 seconds or press and hold the INPUT and ► buttons on the projector for about 3 seconds.
The 10 digit Inquiring Code will be displayed.
NOTE: If there is no key input for about 55 seconds while the Inquiring Code is displayed the menu will close. If necessary repeat the process from 1.3-1.



Inquiring Code
(PASSWORD)

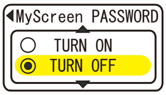
1.3-3 Contact your dealer with the 10 digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.

2. Using the MyScreen PASSWORD Function

The MyScreen PASSWORD function can be used to prohibit access to the MyScreen function and prevent the currently registered MyScreen image from being overwritten.

2.1 Turning on the MyScreen PASSWORD Function

2.1-1 Use the ▲/▼ buttons on the SECURITY menu to select MyScreen PASSWORD and press the ► button to display the MyScreen PASSWORD on/off menu.

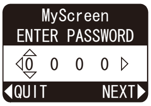


MyScreen PASSWORD
on/off menu

2.2 Setting the PASSWORD

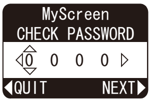
2.2-1 Display the MyScreen on/off menu using the procedure in 2.1-1.

2.2-2 Use the ▲/▼ buttons on the MyScreen PASSWORD on/off menu to select TURN ON.
The ENTER PASSWORD BOX (small) will be displayed.



ENTER PASSWORD
BOX (small)

2.2-3 Use the ▲/▼/◄/► buttons to enter the PASSWORD. Move the cursor to the right side of the ENTER PASSWORD BOX (small) and press the ► button to display the CHECK PASSWORD BOX, enter the same PASSWORD again.



CHECK PASSWORD
BOX

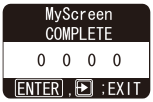
OPTION Menu (continued)

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>

SECURITY

</td><td>

2.2-4 Move the cursor to the right side of the CHECK PASSWORD BOX and press the ► button to display the PASSWORD for about 20 seconds, please make note of the PASSWORD during this time. After the PASSWORD has displayed for about 20 seconds the screen will return to the MyScreen PASSWORD on/off menu.



PASSWORD BOX

Pressing the ENTER button on the remote control or INPUT button on the projector will close the PASSWORD box.

When a PASSWORD is set for MyScreen:

- The MyScreen registration function (and menu) will be unavailable.
- The START UP setting will be locked on MyScreen (and the menu will be unavailable).

Turning the MyScreen PASSWORD off will allow normal operation of both functions.

NOTE : Please do not forget your MyScreen PASSWORD.

2.3 Turning the PASSWORD off

2.3-1 Follow the procedure in 2.1-1 to display the MyScreen PASSWORD on/off menu.

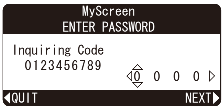
2.3-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). Enter the registered PASSWORD and the screen will return to the MyScreen on/off menu.

If an incorrect PASSWORD is input the menu will close. If necessary repeat the process from 2.3-1.

2.4 If you have forgotten your PASSWORD

2.4-1 Follow the procedure in 2.1-1 to display the MyScreen PASSWORD on/off menu.

2.4-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). The 10 digit Inquiring Code will be displayed inside the BOX.



ENTER PASSWORD BOX (large)

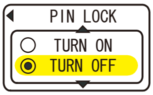
2.4-3 Contact your dealer with the 10 digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.

3. Using the PIN LOCK Function

PIN LOCK is a function which prevents the projector from being used unless a registered Code is input.

3.1 Registering the PIN Code

3.1-1 Use the ▲/▼ buttons on the SECURITY menu to select PIN LOCK and press the ► button or the ENTER button to display the PIN LOCK on/off menu.

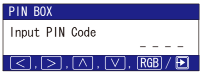
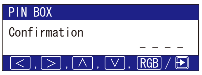
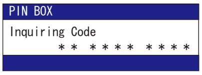


PIN LOCK on/off menu

3.1-2 Use the ▲/▼ buttons on the PIN LOCK on/off menu to select TURN ON and the PIN BOX will be displayed.

</td></tr>
</table>

OPTION Menu (continued)

Item	Description
SECURITY	3.1-3 Input a 4 part PIN Code using the ▲/▼/◄/► /RGB and INPUT buttons. A CONFIRMATION BOX will appear. Reenter the same PIN Code. This will complete the PIN Code registration. NOTE: If there is no key input for about 55 seconds while the PIN BOX or the CONFIRMATION BOX are displayed the menu will close. If necessary repeat the process from 3.1-1.  PIN BOX Afterwards, anytime the projector is restarted after the power switch is turned off the PIN BOX will be displayed. Enter the registered PIN Code.  CONFIRMATION BOX (PIN BOX) The projector can be used after entering the registered PIN Code. If an incorrect PIN Code is input the PIN BOX will be displayed again. If an incorrect PIN Code is input 3 times the projector will turn off. Afterwards the projector will turn off every time an incorrect PIN Code is input. The projector will also turn off if there is no key input for about 5 minutes while the PIN BOX is displayed. This function will activate only when the projector is started after the power switch was turned off. **NOTE** : Please do not forget your PIN Code. **3.2 Turning Off the PIN LOCK Function** 3.2-1 Follow the procedure in 3.1-1 to display the PIN LOCK on/off menu. Use the ▲/▼ buttons to select TURN OFF and the PIN BOX will be displayed. Enter the registered PIN Code to turn the PIN LOCK function off. If an incorrect PASSWORD is entered the menu will close. **3.3 If you have forgotten your PIN Code** 3.3-1 While the PIN BOX is displayed, press and hold the RESET button for three seconds or press and hold the INPUT and ► buttons for three seconds. The 10 digit Inquiring Code will be displayed.  Inquiring Code (PIN Code) NOTE: If there is no key input for about 5 minutes while the Inquiring Code is displayed the projector will turn off. 3.3-2 Contact your dealer with the 10 digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.

OPTION Menu (continued)

Item	Description

SECURITY

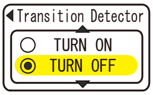
4. Using the Transition Detector Function

While the Transition Detector function is ON, when power switch is started to supply to the projector, it might react as below.
- Transition Detector alarm shown below might appear on screen, if the projector has been moved or re-installed.
- Transition Detector alarm might appear on screen, if the MIRROR setting has been changed.
- Keystone adjustment feature has been prohibited as long as the Transition Detector function is ON.

4.1 Turning On the Transition Detector Function

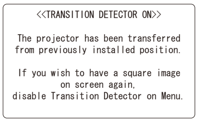
4.1-1 Use the ▲/▼ buttons on the SECURITY menu to select Transition Detector and press the ► or the ENTER button to display the Transition Detector on/off menu. Select TURN ON and the current angle and mirror setting will be recorded.

NOTE: This feature may not function properly if the projector is not in a stable position when TURN ON is selected.



Transition Detector on/off menu

4.1-2 If this function is set to TURN ON when the vertical angle of the projector or mirror setting at which the projector is turned on is different than the previously recorded the Transition Detector Alarm will be displayed and the projector will not display the input signal.


<<TRANSITION DETECTOR ON>>

The projector has been transferred from previously installed position.

If you wish to have a square image on screen again, disable Transition Detector on Menu.

Transition Detector Alarm

Set the Transition Detector off in the SECURITY menu to display the input signal.

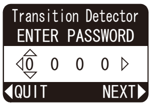
If the Transition Detector ALARM is displayed for about 5 minutes the lamp will turn off.

This function will activate only when the projector is started after the power switch was turned off.

4.2 Setting the Transition Detector PASSWORD

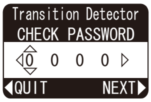
4.2-1 Use the ▲/▼ buttons on the SECURITY menu to select Transition Detector and press the ► or the ENTER button to display the Transition Detector on/off menu.

4.2-2 Use the ▲/▼ buttons on the Transition Detector on/off menu to select TURN ON. The ENTER PASSWORD BOX (small) will be displayed.



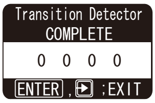
ENTER PASSWORD BOX (small)

4.2-3 Use the ▲/▼/◄/► buttons to enter a PASSWORD. Move the cursor to the right side of the ENTER PASSWORD BOX (small) and press the ► button to display the CHECK PASSWORD BOX, enter the same PASSWORD again.



CHECK PASSWORD BOX

4.2-4 Move the cursor to the right side of the CHECK PASSWORD BOX and press the ► button to display the PASSWORD for about 20 seconds, please make note of the PASSWORD during this time. After the PASSWORD has displayed for about 20 seconds the screen will return to the Transition Detector on/off menu.

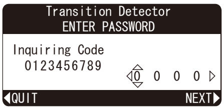


PASSWORD BOX

Pressing the ENTER button on the remote control or the INPUT button on the projector will close the PASSWORD BOX.

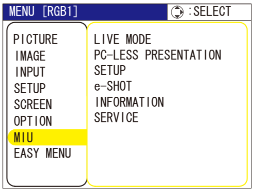
NOTE : Please do not forget your Transition Detector PASSWORD.

OPTION Menu (continued)

Item	Description
SECURITY	**4.3 Setting the Transition Detector off** 4.3-1 Follow the procedure in 4.1-1 to display the Transition Detector on/off menu. 4.3-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). Enter the registered PASSWORD and the screen will return to the Transition Detector on/off menu. If an incorrect PASSWORD is input the menu will close. If necessary repeat the process from 4.3-1. **4.4 If you have forgotten your PASSWORD** 4.4-1 Follow the procedure in 4.1-1 to display the Transition Detector on/off menu. 4.4-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). The 10 digit Inquiring Code will be displayed inside the BOX.  Transition Detector ENTER PASSWORD Inquiring Code 0123456789 0 0 0 0 ENTER PASSWORD BOX (large) 4.4-3 Contact your dealer with the 10 digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.

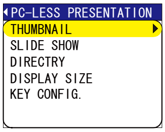
MIU Menu

Select **[MIU]** from the main menu to access the following functions.

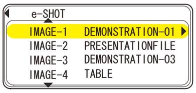
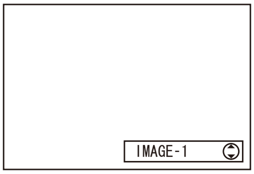
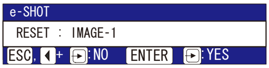
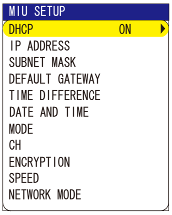
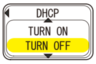

MENU [RGB1]
:SELECT
PICTURE
IMAGE
INPUT
SETUP
SCREEN
OPTION
MIU
EASY MENU
LIVE MODE
PC-LESS PRESENTATION
SETUP
e-SHOT
INFORMATION
SERVICE

NOTE • The factory default setting for DHCP is “TURN OFF”. If your network has DHCP enabled , and need to set [IP ADDRESS], [SUBNET MASK] and [DEFAULT GATEWAY] automatically, please set [DHCP] to “TURN ON”. **(📖 User’s Manual - Network Functions)**
• If you are not utilizing SNTP **(📖 User’s Manual - Network Functions)**, then you must set the DATE AND TIME during the initial installation. Please refer to the item DATE AND TIME on the following list.

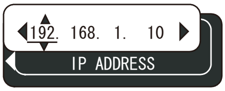
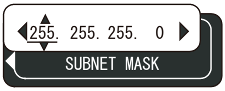
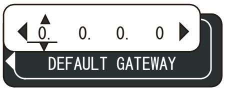
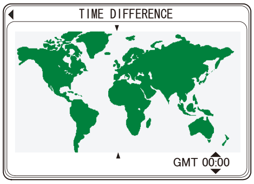
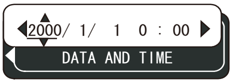
NOTE Consult with your network administrator before connecting to an existing access point on your network. Incorrect network settings on this projector may cause unnecessary troubles on the network.

Item	Description
LIVE MODE	Display the screen appearing on the PC via Network. Press the ► button or ENTER button to display the LIVE MODE Menu. See **[LIVE MODE]** in **[User’s Manual – Network Functions]** for more information.
PC-LESS PRESENTATION	Make a presentation without a PC. The data in the memory card are displayed. Press the ► button or ENTER button to display the PC-LESS PRESENTATION Menu. See **[PC-LESS PRESENTATION]** in **[User’s Manual - Network Functions]** for more information.  PC-LESS PRESENTATION THUMBNAIL SLIDE SHOW DIRECTRY DISPLAY SIZE KEY CONFIG.

MIU Menu (continued)

Item	Operation
e-SHOT	e-SHOT display : Use the ▲/▼ buttons to select an item and the ► or ENTER buttons to display the image. Image1 Image2 Image3 Image4  e-SHOT IMAGE-1 DEMONSTRATION-01 IMAGE-2 PRESENTATIONFILE IMAGE-3 DEMONSTRATION-03 IMAGE-4 TABLE File names of registered images are displayed by 16 characters or less. Example: DEMONSTRATION-01 Once an image is displayed, you can use the ▲/▼ buttons to page through the images. Use the ◄ or ESC buttons to return to the menu.  Pressing the RESET button on the remote control while an image is being displayed will display the RESET menu.  e-SHOT RESET : IMAGE-1 ESC, ◄+ ⊡: NO ENTER ⊡: YES The displayed image can be deleted from the RESET menu using the ENTER button on the remote control or the INPUT button on the projector. If you do not wish to delete the image use the ESC button on the remote control or push the ◄ and INPUT buttons on the projector at the same time. ~Note~ • Items with no image stored cannot be selected. • Images can be changed using the ▲/▼ buttons while the image data downloads. • Insert the SD memory card or USB memory into the projector before you use the e-SHOT function. • Japanese file name is displayed correctly only when the projector's language is set to Japanese. • And, the characters other than alphanumeric character are not displayed correctly in Japanese mode. (Ç, ä etc.)
SETUP	Change Network Settings. Press the ► button or ENTER button to display the MIU SETUP Menu.  MIU SETUP DHCP ON IP ADDRESS SUBNET MASK DEFAULT GATEWAY TIME DIFFERENCE DATE AND TIME MODE CH ENCRYPTION SPEED NETWORK MODE **DHCP (Dynamic Host Configuration Protocol)** DHCP TURN ON/TURN OFF: Use the ▲/▼ buttons to turn DHCP on/off. TURN ON ⇔ TURN OFF Select TURN OFF when the network does not have DHCP enabled.  DHCP TURN ON TURN OFF

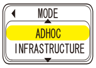
MIU Menu (continued)

Item	Description
SETUP	**IP ADDRESS** Input the IP ADDRESS : Use the ▲/▼/◀/▶ buttons to enter the IP ADDRESS. This function is available as long as DHCP is set to “TURN OFF”.  192. 168. 1. 10 IP ADDRESS ~Note~ IP ADDRESS is a number which identifies this projector on the network. You cannot have two devices with the same IP ADDRESS on the same network. **SUBNET MASK** Input the SUBNET MASK : Use the buttons ▲/▼/◀/▶ to enter the same SUBNET MASK of your PC. This function is available as long as DHCP is set to “TURN OFF”.  255. 255. 255. 0 SUBNET MASK **DEFAULT GATEWAY** Input the DEFAULT GATEWAY : Use the ▲/▼/◀/▶ buttons to enter the DEFAULT GATEWAY (a node on a computer network that serves as an access point to another network) address. This function is available as long as DHCP is set to “TURN OFF”.  0. 0. 0. 0 DEFAULT GATEWAY **TIME DIFFERENCE** Input the TIME DIFFERENCE : Use the ▲/▼ buttons to enter the TIME DIFFERENCE. Set the same TIME DIFFERENCE as that on your PC. If unsure, ask your network administrator. Use the ◀ button to return to the menu after setting the TIME DIFFERENCE.  TIME DIFFERENCE GMT 00:00 **DATE AND TIME** Entering DATE AND TIME : Use the ▲/▼/◀/▶ buttons to enter the Year (last two digits), Month, Date, Hour and Minute.  2000/ 1/ 1 0 : 00 DATA AND TIME

MIU Menu (continued)

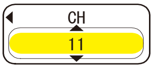
<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>SETUP</td><td>

MODE
Select the communication connection control method to use between the PC and projector.
Match to your PC’s settings.
Use the ▲/▼ buttons to select the MODE to be used.

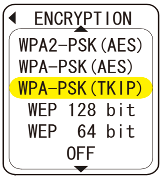

MODE
ADHOC
INFRASTRUCTURE

ADHOC ⇔ INFRASTRUCTURE

CH
Select the channel when using a wireless LAN connection.
(Channels 1 to 11 are available)
*The available channels would be various depending on a country. In addition, wireless LAN card might be required due to the standard.



ENCRYPTION
Select the encrypting method.
Use the ▲/▼ buttons to select the encryption method to be used.


ENCRYPTION
WPA2-PSK(AES)
WPA-PSK(AES)
WPA-PSK(TKIP)
WEP 128 bit
WEP 64 bit
OFF

WPA2-PSK(AES) ⇐ (OFF)
⇳
WPA-PSK(AES) ⇔ WPA-PSK(TKIP) ⇔ WEP 128bit ⇔ WEP 64bit ⇔ OFF

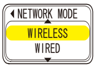
SPEED
Use the ▲/▼ buttons to select the transfer rate.

AUTO⇔54⇔48⇔36⇔24⇔18⇔12⇔11⇔9⇔6⇔5.5⇔2⇔1 (Mbps)

- The AUTO mode automatically selects the optimum rate.
- Transfer rates may change due to the Network situation.

Mbps : Megabits per second

NETWORK MODE
Select the Network mode.
Use the ▲/▼ buttons to select the Network mode.


NETWORK MODE
WIRELESS
WIRED

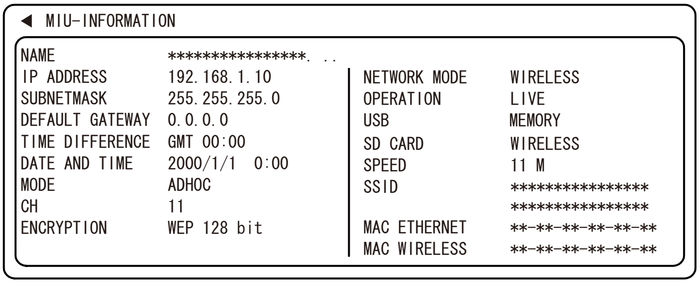
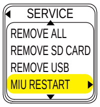
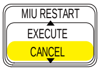
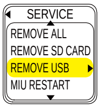
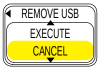
WIRELESS ⇔ WIRED

~Note~

- Network mode will be initialized whenever the power is turned on with Power switch.
- The Wireless will be enabled when Wireless Network card is installed.
- The Wired will be enabled when Wireless Network card is not installed.

</td></tr>
</table>

MIU Menu (continued)

Item	Description
INFORMATION	INFORMATION display : Use the ► or ENTER buttons to view network information and confirm settings. See **[INFORMATION]** in **[User's Manual] – Network Functions]** for more information. ~Note~ • Only the first 16 characters of the projector name are displayed. • Only the first 32 characters of the SSID are displayed. • When the voltage level of battery for built in clock decreases, set time may become incorrect even though accurate date and time are input. Replace a battery through the following the instructions. **(📖*61*)** • MAC wireless will not be displayed when NETWORK MODE is WIRED even if wireless LAN SD card is mounted. • IP ADDRESS, SUBNET MASK, DEFAULT GATEWAY displays "0.0.0.0" at the following condition. (1) NETWORK MODE is WIRELESS and wireless LAN SD card is not mounted. (2) DHCP is ON and projector dose not get address from DHCP server.  ◄ MIU-INFORMATION NAME ****************. .. IP ADDRESS 192.168.1.10 SUBNETMASK 255.255.255.0 DEFAULT GATEWAY 0.0.0.0 TIME DIFFERENCE GMT 00:00 DATE AND TIME 2000/1/1 0:00 MODE ADHOC CH 11 ENCRYPTION WEP 128 bit NETWORK MODE WIRELESS OPERATION LIVE USB MEMORY SD CARD WIRELESS SPEED 11 M SSID **************** **************** MAC ETHERNET **-**-**-**-**-** MAC WIRELESS **-**-**-**-**-**
SERVICE	**MIU RESTART** Choose the RESTART and press the button ►.  SERVICE REMOVE ALL REMOVE SD CARD REMOVE USB MIU RESTART Then use the button ▲ to execute.  Network will be once cut off when choose restart. If DHCP is selected on, IP address may be changed. After selecting RESTART, Network menu may not be controlled approx. 20 seconds. **REMOVE MEDIA** Remove SD CARD and USB memory safely. Choose the media and press the button ►.  SERVICE REMOVE ALL REMOVE SD CARD REMOVE USB MIU RESTART Then use the button ▲ to execute.  ~Note~ Make sure to execute this procedure before you remove the SD Card and USB Memory.

Maintenance

Lamp

⚠ **WARNING** ⚠ HIGH VOLTAGE ⚠ HIGH TEMPERATURE ⚠ HIGH PRESSURE

►The projector uses a high-pressure mercury glass lamp. The lamp can break with a loud bang, or burn out, if jolted or scratched, handled while hot, or worn over time. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.

►**About disposal of a lamp** • This product contains a mercury lamp; do not put it in a trash. Dispose of it in accordance with environmental laws.
For lamp recycling, go to www.lamprecycle.org. (in the US)
For product disposal, contact your local government agency or www.eiae.org (in the US) or www.epsc.ca (in Canada).
For more information, call your dealer.

Disconnect the plug from the power outlet

- If the lamp should break (it will make a loud bang when it does), unplug the power cord from the outlet, and make sure to request a replacement lamp from your local dealer. Note that shards of glass could damage the inside of the projector, or cause injury during handling, so please do not try to clean the projector or replace the lamp yourself.
- If the lamp should break (it will make a loud bang when it does), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents, or get it in your eyes or mouth.
- Before replacing the lamp, turn the projector off and unplug the power cord, then wait at least 45 minutes for the lamp to cool sufficiently. Handling the lamp while hot can cause burns, as well as damaging the lamp.

- Never unscrew except the appointed (marked by an arrow) screws.
- Do not open the lamp cover while the projector is suspended from the ceiling. This is dangerous, since if the lamp's bulb has broken, the shards will fall out when the cover is opened. In addition, working in high places is dangerous, so ask your local dealer to have the lamp replaced even if the bulb is not broken.
- Do not use the projector with the lamp cover removed. To replace the lamp, make sure that the screws are tightened firmly. Loose screws could result in damage or injury.

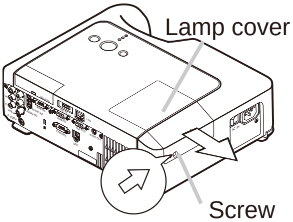
- Use only the lamp of the specified type.
- If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer or a service representative.
- Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
- Using the lamp for long periods of time, could cause it dark, not to light up or to burst. When the pictures appear dark, or when the color tone is poor, please replace the lamp as soon as possible. Do not use old (used) lamps; this is a cause of breakage.

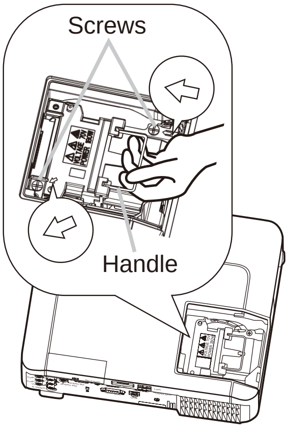
Lamp (continued)

A lamp has a finite product life. Using the lamp for long periods of time could cause the pictures darker or the color tone poor. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. Preparation of a new lamp and early replacement are recommended.
To prepare a new lamp, contact your dealer and tell the lamp type number.

Type number = 456-8776.

1. Turn the projector off, and unplug the power cord. Allow the lamp to cool for at least 45 minutes.
2. Prepare a new lamp.
   If the projector is mounted on the ceiling, or if the lamp has broken, also ask the dealer to replace the lamp.





In the case of replacement by yourself,

3. Loosen the lamp cover screw (marked by arrow) and then slide the lamp cover to the side to remove it.
4. Loosen the 2 screws (marked by arrow) of the lamp, and slowly pick up the lamp by the handles.
5. Insert the new lamp, and retighten firmly the two screws that are loosened in the previous process to lock it in place.
6. Slide the lamp cover back in place and firmly fasten the lamp cover a screw.
7. Turn the projector on and reset the lamp time using the LAMP TIME function in the OPTION menu (📖*43*).

(1) Press the MENU button to display a menu. Only when the EASY MENU has appeared, please perform the next step (2).
(2) Point at the “Go to Advanced Menu …” in the menu using ▼/▲ button, then press the ► button.
(3) Point at the “OPTION” in the left column of the menu using ▼/▲ button, then press the ► button.
(4) Point at the ”LAMP TIME” using ▼/▲ button, then press the ► button. A dialog will appear.
(5) Press the ▲ button to select “RESET” on the dialog. It performs resetting the lamp time.

NOTE • Please reset the lamp time only when you have replaced the lamp, for a suitable indication about the lamp.

Air filter

⚠WARNING ►Before caring, make sure the power switch is off and the power cable is not plugged in, then allow the projector to cool sufficiently. The care in a high temperature state of the projector could cause an electric shock, a burn and/or malfunction to the projector.
►Use only the air filter of the specified type. Do not use the projector with the air filter and the filter cover removed. It could result in a fire and/or malfunction to the projector.
►The air filter should be cleaned periodically. If the air filter becomes clogged by dust or the like, internal temperatures rise and could cause a fire, a burn and/or malfunction to the projector.

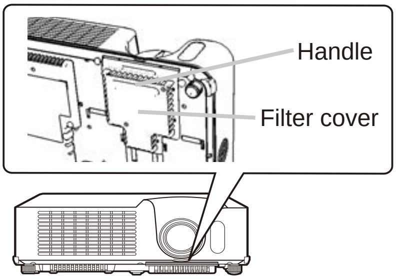
NOTE • Please replace the air filter when it is damaged or too soiled, and also when you replace the lamp.
• Please reset the filter time only when you have cleaned or replaced the air filter, for a suitable indication about the air filter. (📖*43*)
• The projector may display the message such as “CHECK THE AIR FLOW” or turn off the projector, to prevent the internal heat level rising.

If the air filter becomes clogged by dust or the like, internal temperatures rise and could cause a fire, a burn and/or malfunction to the projector. When the indicators or a message prompts you to clean the air filter, clean the air filter as soon as possible.
Please check and clean the air filter periodically, even if there is no message. Please replace the air filter when it is damaged or too soiled. Preparation of a new air filter is recommended.
To prepare a new air filter, contact your dealer and tell the air filter type number.

Type number = NJ22222

And also when you replace the lamp, please replace the air filter. An air filter of specified type will come together with a replacement lamp for this projector.

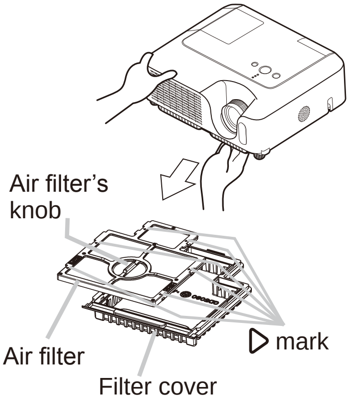
1. Turn the projector off, and unplug the power cord. Allow the lamp to cool for at least 45 minutes.
2. When the projector is suspended from the ceiling, apply the vacuum cleaner to and around the filter cover first, to prevent penetration of dust or the like.
3. While supporting the projector with one hand, use your other hand to pull the filter cover forward in the direction of the arrow. Remove the air filter.



Air filter (continued)

4. Apply a vacuum cleaner to the air filter and the filter cover. Please replace the air filter when it is damaged or too soiled.

5. Replace the air filter in its original position. Secure the air filter in place by pressing each of the six ▷ locations.
Make sure there is no dust or dirt remaining after the cover is in place. If any dust or dirt remains use a vacuum cleaner to remove it as when placing the filter cover on the air filter.
Reattach the filter cover to the projector by aligning the filter cover with the grooves on the projector. While holding the handle, push down on the filter cover until it locks firmly in place.



6. Turn the projector on and reset the filter time using the FILTER TIME function in the OPTION menu (📖*43*).

(1) Press the MENU button to display a menu. When the EASY MENU has appeared, please skip the next step (2).
(2) Point at the "OPTION" in the left column of the menu using ▼/▲ button, then press the ► button.
(3) Point at the "FILTER TIME" using ▼/▲ button, then press the ► button. A dialog will appear.
(4) Press the ▲ button to select "RESET" on the dialog. It performs resetting the filter time.

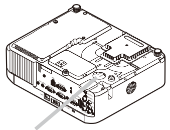
Replacing Internal Clock battery

Consumption of the battery makes the clock not to work correctly. When the clock is wrong or it has stopped, please replace the battery according to the following procedures.

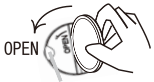
⚠WARNING ►Always handle the batteries with care and use them only as directed. Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.
And also improper use may result in cracking or leakage, which could result in fire, injury and/or pollution of the surrounding environment.
- Be sure to use only the batteries specified. Do not use batteries of different types at the same time. Do not mix a new battery with used one.
- Make sure the plus and minus terminals are correctly aligned when loading a battery. If the battery is placed in the battery holder upside-down, it may be hard to remove.
- Keep a battery away from children and pets. If swallowed consult a physician immediately for emergency treatment.
- Do not short circuit or solder a battery.
- Do not allow a battery in a fire or water. Keep batteries in a dark, cool and dry place.
- If you observe a leakage of a battery, wipe out the flower and then replace a battery. If the liquid adheres to your body or clothes, rinse well with water immediately.
- Obey the local laws on disposing the battery.

1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.

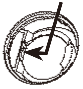
2. After making sure that the projector has cooled adequately, slowly turn over the projector, so that the bottom is facing.



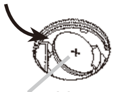
3. Remove the battery cover.
   Turn the battery cover in the direction indicated “OPEN” using such as coins. Then the battery cover will come up. While removing the battery cover, pick its knob.

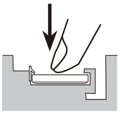


4. Take the old battery out.
   Press the metal claw of the battery holder. Then the battery will come up. Remove the battery.

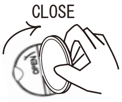


5. Put a new battery in.
   Replace battery with HITACHI MAXELL, Part No.CR2032 only. Use of another battery may present a risk of fire or explosion.
   Insert a new battery in the battery holder according to its minus terminal ⊖ as indicated in the battery holder, so that the side marked by + is facing. And push the battery into the battery holder fully to fix.





6. Close the battery cover.
   Replace the battery cover in place, then turn it in the direction indicated “CLOSE” using such as coins, to fix.



If the battery is placed in the battery holder upside-down, follow the procedure below to remove and reload it properly.
1. Remove the battery cover as described in steps 1 through 3 above.
2. Turn the projector over again, so that the top of the projector is facing up.
3. While lifting the side of the projector closest to the lens, press the metal claw of the battery holder. The battery will fall out of the holder, so be careful not to lose it.
4. Turn the projector over once more, so that the bottom faces up, and reload the battery correctly.

NOTE • The internal clock’s time will be reset when the battery is removed.
Please reconfigure the time via the menu or a web browser after replacing the battery.
(Please refer to 📖*54* and User’s Manual-Network Functions: Date/Time Settings for more information.)

Other care

⚠WARNING ►Before caring, make sure the power switch is off and the power cable is not plugged in, and then allow the projector to cool sufficiently. The care in a high temperature state of the projector could cause a burn and/or malfunction to the projector.
►Never try to care for the inside of the projector personally. Doing is so dangerous.
►Avoid wetting the projector or inserting liquids in the projector. It could result in a fire, an electric shock, and/or malfunction to the projector.
• Do not put a container containing water, cleaner or chemicals near the projector.
• Do not use aerosols or sprays.
⚠CAUTION ►Please take right care of the projector according to the following. Incorrect care could cause not only an injury but adverse influence such as discoloration, peeling paint, etc.
►Do not use cleaner or chemicals other than those listed below.
►Do not polish or wipe with hard objects.

Inside of the projector

In order to ensure the safe use of your projector, please have it cleaned and inspected by your dealer about once every year.

Caring for the lens

If the lens is flawed, soiled or fogged, it could cause deterioration of display quality. Please take care of the lens, being cautious of handling.

1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.
2. After making sure that the projector is cool adequately, lightly wipe the lens with a commercially available lens-cleaning wipe. Do not touch the lens directly with your hand.

Caring for the cabinet and remote control

Incorrect care could have adverse influence such as discoloration, peeling paint, etc.

1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.
2. After making sure that the projector is cool adequately, lightly wipe with gauze or a soft cloth.
   If soiling is severe, dip soft cloth in water or a neutral cleaner diluted in water, and wipe lightly after wringing well. Then, wipe lightly with a soft, dry cloth.

Troubleshooting

Related messages

When the unit's power is on, messages such as those shown below may be displayed. When any such message is displayed on the screen, please follow the instructions described below. If the same message is displayed after the remedy, or if a message other than the following appears, please contact your dealer or service company.

Although these messages will be automatically disappeared around several minutes, it will be reappeared every time the power is turned on.

Message	Description
NO INPUT IS DETECTED ∗∗∗	**There is no input signal.** Please confirm the signal input connection, and the status of the signal source.
SYNC IS OUT OF RANGE ∗∗∗ fH ∗∗kHz fV ∗∗Hz	**The horizontal or vertical frequency of the input signal is not within the specified range.** Please confirm the specs for your projector or the signal source specs.
CHECK THE AIR FLOW	**The internal temperature is rising.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After having confirmed the following items, please turn the power ON again. • Is there blockage of the air passage aperture? • Is the air filter dirty? • Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please set FAN SPEED of the SERVICE item in the OPTION menu to HIGH.
REMINDER ∗∗∗ HRS PASSED AFTER THE LAST FILTER CHECK. FILTER MAINTENANCE IS ESSENTIAL TO REMOVE WARNING MESSAGE, RESET FILTER TIMER. SEE MANUAL FURTHER INFO.	**A note of precaution when cleaning the air filter.** Please immediately turn the power off, and clean or change the air filter referring to the “Air Filter” section of this manual (📖*59*). After you have cleaned or changed the air filter, please be sure to reset the filter timer (📖*43*).

Regarding the indicator lamps

Lighting and flashing of the POWER indicator, the LAMP indicator, and the TEMP indicator have the meanings as described in the table below. Please follow the instructions within the table. If the same indication is displayed after the remedy, or if an indication other than the following is displayed, please contact your dealer or service company.

POWER indicator	**LAMP indicator**	**TEMP indicator**	**Description**
Lighting In **Orange**	Turned **off**	Turned **off**	**The projector is in a standby state.** Please refer to the section "Power On/Off".
*Blinking In **Green***	Turned **off**	Turned **off**	**The projector is warming up.** Please wait.
Lighting In **Green**	Turned **off**	Turned **off**	**The projector is in an on state.** Ordinary operations may be performed.
*Blinking In **Orange***	Turned **off**	Turned **off**	**The projector is cooling down.** Please wait.
*Blinking In **Red***	(discre-tionary)	(discre-tionary)	**The projector is cooling down. A certain error has been detected.** Please wait until the POWER indicator finishes blinking, and then perform the proper measure using the item descriptions below.
*Blinking In **Red** or* Lighting In **Red**	Lighting In **Red**	Turned **off**	**The lamp does not light, and there is a possibility that interior portion has become heated.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation of the following items, and then turn the power on again. • Is there blockage of the air passage aperture? • Is the air filter dirty? • Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please change the lamp referring to the section "Lamp".
*Blinking In **Red** or* Lighting In **Red**	*Blinking In **Red***	Turned **off**	**The lamp cover has not been properly fixed.** Please turn the power off, and allow the projector to cool down at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp cover. After performing any needed maintenance, turn the power on again. If the same indication is displayed after the remedy, please contact your dealer or service company.

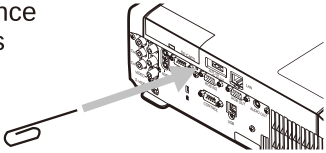
Regarding the indicator lamps (continued)

POWER indicator	LAMP indicator	TEMP indicator	Description
Blinking *In* ***Red*** *or* Lighting In **Red**	Turned **off**	*Blinking* *In* ***Red***	**The cooling fan is not operating.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation that no foreign matter has become caught in the fan, etc., and then turn the power on again. If the same indication is displayed after the remedy, please contact your dealer or service company.
Blinking *In* ***Red*** *or* Lighting In **Red**	Turned **off**	Lighting In **Red**	**There is a possibility that the interior portion has become heated.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation of the following items, and then turn the power on again. • Is there blockage of the air passage aperture? • Is the air filter dirty? • Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please set FAN SPEED of the SERVICE item in the OPTION menu to HIGH.
Lighting In **Green**	Simultaneous *blinking in* ***Red***		**It is time to clean the air filter.** Please immediately turn the power off, and clean or change the air filter referring to the section “Air Filter”. After cleaning or changing the air filter, please be sure to reset the filter timer. After the remedy, reset the power to ON.
Lighting In **Green**	Alternative *blinking in* ***Red***		**There is a possibility that the interior portion has become overcooled.** Please use the unit within the usage temperature parameters (5°C to 35°C). After the treatment, reset the power to ON.
Blinking in ***Green*** *for approx. 3 seconds*	Turned **off**	Turned **off**	**At least 1 “Power ON” schedule is saved to the projector.** (Please refer to the User’s Manual-Network Functions: Schedule Settings for more information.)

NOTE • When the interior portion has become overheated, for safety purposes, the power source is automatically turned off, and the indicator lamps may also be turned off. In such a case, press the “O” (OFF) side of the power switch, and wait at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover, and then turn the power on again.

Phenomena that may be easy to be mistaken for machine defects

⚠WARNING ►Never use the projector if abnormal operations such as smoke, strange odor, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter, etc. should occur. In such cases, immediately turn off the power switch and then disconnect the power plug from the power outlet. After making sure that the smoke or odor has stopped, contact your dealer or service company.



1. Before requesting repair, please check in accordance with the following chart. This operation sometimes resolves your problem.

If the situation cannot be corrected,

2. The projector's microprocessor may need to be reset. Please push the Restart switch by using a cocktail stick or similar and the projector will restart.

3. Some setting may be wrong. Please use the FACTORY RESET function of the SERVICE item in the OPTION menu (📖*45*) to reset all settings to factory default.

Then, if the problem is not removed after the remedy, please contact your dealer or service company.

Phenomenon	Cases not involving a machine defect	Reference page
Power does not come on.	**The electrical power cord is not plugged in.** Correctly connect the power cord.	15
	The power switch is not set to the on position. Set the power switch to [|] (On).	19
	The main power source has been interrupted during operation such as by a power outage (blackout), etc. Please turn the power off, and allow the projector to cool down at least 2 minutes, then turn the power on again.	19
	Either there is no lamp and/or lamp cover, or either of these has not been properly fixed. Please turn the power off, and allow the projector to cool down at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover, and then turn the power on again.	64, 65
Neither sounds nor pictures are outputted.	**The signal cables are not correctly connected.** Correctly connect the connection cables.	13, 14
	Signal source does not correctly work. Correctly set up the signal source device by referring to the manual of the source device.	–
	The input changeover settings are mismatched. Select the input signal, and correct the settings.	20, 21

Phenomena that may be easy to be mistaken for machine defects (continued)

Phenomenon	Cases not involving a machine defect	Reference page
Sound does not come out.	**The signal cables are not correctly connected.** Correctly connect the audio cables.	13, 14
	The MUTE function is working. Restore the sound pressing the MUTE or VOLUME button on the remote control.	20
	The volume is adjusted to an extremely low level. Adjust the volume to a higher level using the menu function or the remote control.	20
	The AUDIO setting is not correct. Correctly set the AUDIO item in the SETUP menu.	38
No pictures are displayed.	**The lens cap is attached.** Remove the lens cover.	19
	The signal cables are not correctly connected. Correctly connect the connection cables.	13, 14
	The brightness is adjusted to an extremely low level. Adjust BRIGHTNESS to a higher level using the menu function or the remote control.	27
	The computer cannot detect the projector as a plug and play monitor. Make sure that the computer can detect a plug and play monitor using another plug and play monitor.	12
	The BLANK screen is displayed. Press the BLANK button on the remote control.	24
Video screen display freezes.	**The FREEZE function is working.** Press the FREEZE button to restore the screen to normal.	24
Colors have a faded- out appearance, or Color tone is poor.	**Color settings are not correctly adjusted.** Perform picture adjustments by changing the COLOR TEMP, COLOR, TINT and/or COLOR SPACE settings, using the menu functions.	28, 30, 34
	COLOR SPACE setting is not suitable. Change the COLOR SPACE setting to AUTO, RGB, SMPTE240, REC709 or REC601.	34

Phenomena that may be easy to be mistaken for machine defects (continued)

Phenomenon	Cases not involving a machine defect	Reference page
Pictures appear dark.	**The brightness and/or contrast are adjusted to an extremely low level.** Adjust BRIGHTNESS and/or CONTRAST settings to a higher level using the menu function.	27, 28
	The WHISPER function is working. Select NORMAL for the WHISPER item in the SETUP menu.	28, 37
	The lamp is approaching the end of its product lifetime. Replace the lamp.	57, 58
Pictures appear blurry.	**Either the focus and/or horizontal phase settings are not properly adjusted.** Adjust the focus using the focus ring, and/or H PHASE using the menu function.	21, 32
	The lens is dirty or misty. Clean the lens referring to the section “Caring for the lens”.	62

NOTE • Although bright spots or dark spots may appear on the screen, this is a unique characteristic of liquid crystal displays, and it does not constitute or imply a machine defect.

Warranty and after-service

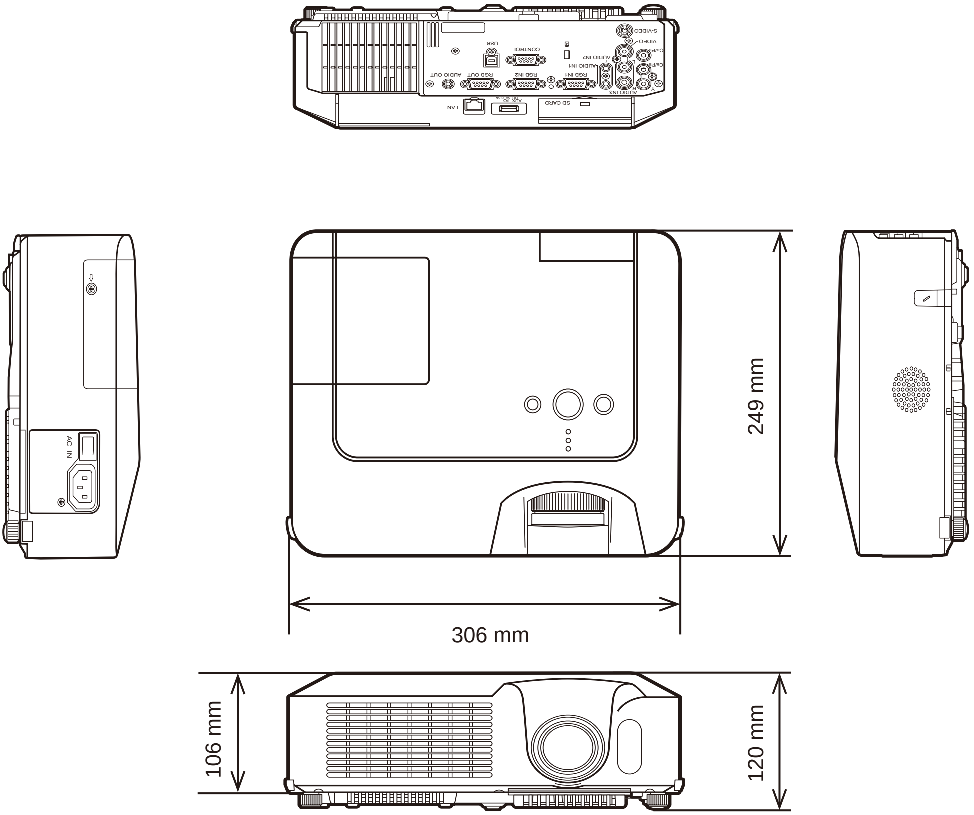
If a problem occurs with the equipment, first refer to the "Troubleshooting" and run through the suggested checks. If this does not resolve the problem, please contact your dealer or service company. They will tell you what warranty condition is applied.

Specifications

NOTE • These specifications are subject to change without notice.

Item		Specification
Product name		Liquid crystal projector
Liquid Crystal panel	Panel size	1.6 cm (0.63 type)
	Drive system	TFT active matrix
	Pixels	786,432 pixels (1024 horizontal x 768 vertical)
Lens		Zoom lens F=1.7 ~ 1.9 f=18.9 ~ 22.6 mm
Lamp		200W UHB
Speaker		1W x 1
Power Supply		AC100-120V/3.5A, AC220-240V/1.5A
Power Consumption		330W
Temperature range		5 ~ 35°C (Operating)
Size		306 (W) x 106 (H) x 249 (D) mm (Not including protruding parts) • Please refer to the following figure.
Weight (mass)		3.3 kg
Ports		**RGB input:** RGB IN1..D-sub 15pin mini x1 RGB IN2..D-sub 15pin mini x1 **RGB output:** RGB OUT..D-sub 15pin mini x1 **Audio input:** AUDIO 1...........Stereo mini x1 AUDIO 2...........Stereo mini x1 AUDIO 3..................... RCA x2 **Audio output:** AUDIO OUT ....Stereo mini x1 **Video input:** COMPONENT VIDEO (Y, CB/PB, CR/PR)...... RCA x3 S-Video ....Mini DIN x1 Video .... RCA x1 **Communication port:** CONTROL............D-sub 9pin x1 USB ....USB(B) x1 LAN (Wired)..............RJ-45 x1 LAN (Wireless) ....SD Card Slot x1 **Memory Port :** AUX I / O...... ....USB(A) x1
Optional parts	Lamp	
	Air filter	NJ22222
	Others	• Please consult your dealer.

Specifications (continued)


S-VIDEO
VIDEO
AUDIO IN2
AUDIO IN1
CONTROL
USB
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
AUDIO IN3
SD CARD
AUX I/O
LAN
AC IN
249 mm
306 mm
106 mm
120 mm

Projector

8776-W

User's Manual – Operating Guide

Technical

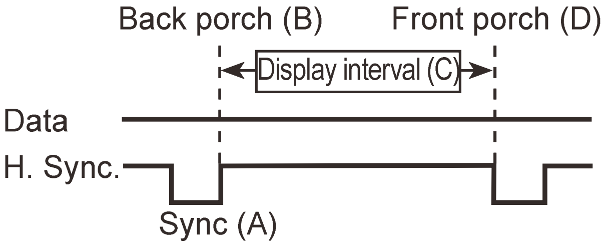
Example of computer signal

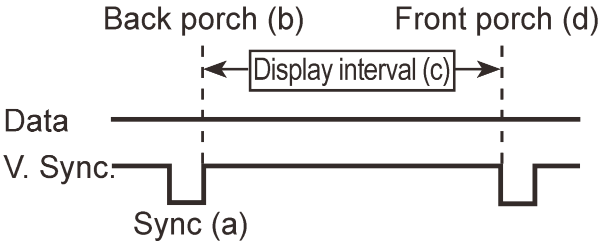
Resolution (H x V)	H. frequency (kHz)	V. frequency (Hz)	Rating	Signal mode
720 x 400	37.9	85.0	VESA	TEXT
640 x 480	31.5	59.9	VESA	VGA (60Hz)
640 x 480	37.9	72.8	VESA	VGA (72Hz)
640 x 480	37.5	75.0	VESA	VGA (75Hz)
640 x 480	43.3	85.0	VESA	VGA (85Hz)
800 x 600	35.2	56.3	VESA	SVGA (56Hz)
800 x 600	37.9	60.3	VESA	SVGA (60Hz)
800 x 600	48.1	72.2	VESA	SVGA (72Hz)
800 x 600	46.9	75.0	VESA	SVGA (75Hz)
800 x 600	53.7	85.1	VESA	SVGA (85Hz)
832 x 624	49.7	74.5		Mac 16” mode
1024 x 768	48.4	60.0	VESA	XGA (60Hz)
1024 x 768	56.5	70.1	VESA	XGA (70Hz)
1024 x 768	60.0	75.0	VESA	XGA (75Hz)
1024 x 768	68.7	85.0	VESA	XGA (85Hz)
1152 x 864	67.5	75.0	VESA	1152 x 864 (75Hz)
1280 x 960	60.0	60.0	VESA	1280 x 960 (60Hz)
1280 x 1024	64.0	60.0	VESA	SXGA (60Hz)
1280 x 1024	80.0	75.0	VESA	SXGA (75Hz)
1280 x 1024	91.1	85.0	VESA	SXGA (85Hz)
1600 x 1200	75.0	60.0	VESA	UXGA (60Hz)
1280 x 768	47.7	60.0	VESA	W-XGA (60Hz)
1400 x 1050	65.2	60.0	VESA	SXGA+ (60Hz)

NOTE • Be sure to check jack type, signal level, timing and resolution before connecting this projector to a computer.
- Some computers may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
- Depending on the input signal, full-size display may not be possible in some cases. Refer to the number of display pixels above.
- Although the projector can display signals with resolution up to UXGA (1600x1200), the signal will be converted to the projector’s panel resolution before being displayed. The best display performance will be achieved if the resolutions of the input signal and projector panel are identical.
- Automatically adjustment may not function correctly with some input signals.
- The image may not be displayed correctly when the input sync signal is a composite sync or a sync on G.

Initial set signals

The following signals are used for the initial settings. The signal timing of some computer models may be different. In such case, adjust the items V POSITION and H POSITION in the IMAGE menu.

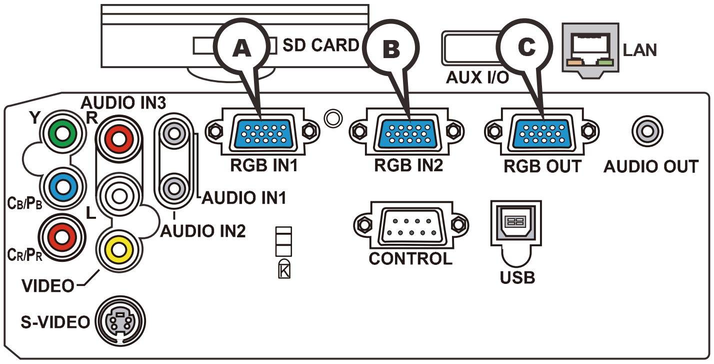




Computer/ Signal	Horizontal signal timing (µs)			
	(A)	(B)	(C)	(D)
TEXT	2.0	3.0	20.3	1.0
VGA (60Hz)	3.8	1.9	25.4	0.6
VGA (72Hz)	1.3	4.1	20.3	0.8
VGA (75Hz)	2.0	3.8	20.3	0.5
VGA (85Hz)	1.6	2.2	17.8	1.6
SVGA (56Hz)	2.0	3.6	22.2	0.7
SVGA (60Hz)	3.2	2.2	20.0	1.0
SVGA (72Hz)	2.4	1.3	16.0	1.1
SVGA (75Hz)	1.6	3.2	16.2	0.3
SVGA (85Hz)	1.1	2.7	14.2	0.6
Mac 16" mode	1.1	3.9	14.5	0.6
XGA (60Hz)	2.1	2.5	15.8	0.4
XGA (70Hz)	1.8	1.9	13.7	0.3
XGA (75Hz)	1.2	2.2	13.0	0.2
XGA (85Hz)	1.0	2.2	10.8	0.5
1152 x 864 (75Hz)	1.2	2.4	10.7	0.6
1280 x 960 (60Hz)	1.0	2.9	11.9	0.9
SXGA (60Hz)	1.0	2.3	11.9	0.4
SXGA (75Hz)	1.1	1.8	9.5	0.1
SXGA (85Hz)	1.0	1.4	8.1	0.4
UXGA (60Hz)	1.2	1.9	9.9	0.4
W-XGA (60Hz)	1.7	2.5	16.0	0.8
SXGA+ (60Hz)	1.2	2.0	11.4	0.7

Computer/ Signal	Vertical signal timing (lines)			
	(a)	(b)	(c)	(d)
TEXT	3	42	400	1
VGA (60Hz)	2	33	480	10
VGA (72Hz)	3	28	480	9
VGA (75Hz)	3	16	480	1
VGA (85Hz)	3	25	480	1
SVGA (56Hz)	2	22	600	1
SVGA (60Hz)	4	23	600	1
SVGA (72Hz)	6	23	600	37
SVGA (75Hz)	3	21	600	1
SVGA (85Hz)	3	27	600	1
Mac 16" mode	3	39	624	1
XGA (60Hz)	6	29	768	3
XGA (70Hz)	6	29	768	3
XGA (75Hz)	3	28	768	1
XGA (85Hz)	3	36	768	1
1152 x 864 (75Hz)	3	32	864	1
1280 x 960 (60Hz)	3	36	960	1
SXGA(60Hz)	3	38	1024	1
SXGA (75Hz)	3	38	1024	1
SXGA (85Hz)	3	44	1024	1
UXGA (60Hz)	3	46	1200	1
W-XGA (60Hz)	3	23	768	1
SXGA+ (60Hz)	3	33	1050	1

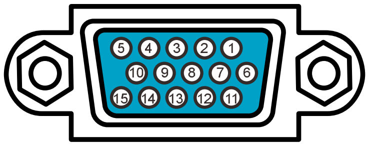
Connection to the ports


A
B
C
SD CARD
AUX I/O
LAN
AUDIO IN3
Y
R
CB/PB
L
CR/PR
VIDEO
S-VIDEO
AUDIO IN1
AUDIO IN2
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
CONTROL
USB

ⒶRGB IN1, ⒷRGB IN2, ⒸRGB OUT

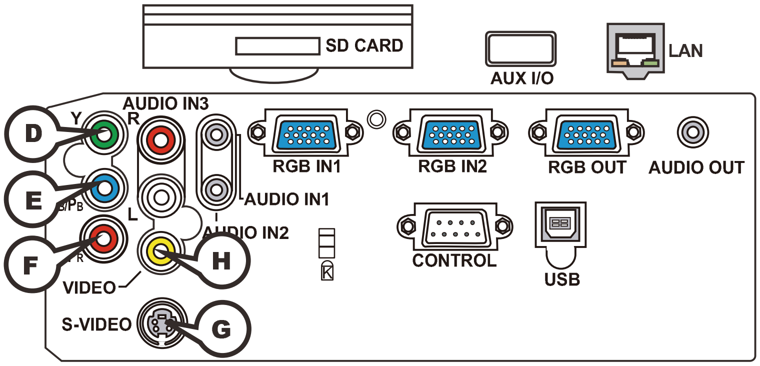
D-sub 15pin mini shrink jack

- Video signal: RGB separate, Analog, 0.7Vp-p, 75Ω terminated (positive)
- H/V. sync. Signal: TTL level (positive/negative)
- Composite sync. Signal: TTL level


5
4
3
2
1
10
9
8
7
6
15
14
13
12
11

At RGB signal

Pin	Signal
1	Video Red
2	Video Green
3	Video Blue
4	(No connection)
5	Ground
6	Ground Red
7	Ground Green
8	Ground Blue
9	(No connection)
10	Ground
11	(No connection)
12	Ⓐ: SDA (DDC data), Ⓑ/Ⓒ : (No connection)
13	H. sync / Composite sync.
14	V. sync.
15	Ⓐ: SCL (DDC clock), Ⓑ/Ⓒ : (No connection)


SD CARD
AUX I/O
LAN
AUDIO IN3
R
L
Y
D
E
F
B/PB
R
VIDEO
S-VIDEO
G
H
AUDIO IN1
AUDIO IN2
K
RGB IN1
RGB IN2
RGB OUT
AUDIO OUT
CONTROL
USB

COMPONENT VIDEO ⒹY, ⒺCB/PB, ⒻCR/PR

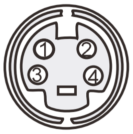
RCA jack x3

- System: 525i(480i), 525p(480p), 625i(576i), 750p(720p), 1125i(1080i)

Port	Signal
Y	Component video Y, 1.0±0.1Vp-p, 75Ω terminator with composite
CB/PB	Component video CB/PB, 0.7±0.1Vp-p, 75Ω terminator
CR/PR	Component video CR/PR, 0.7±0.1Vp-p, 75Ω terminator

ⒼS-VIDEO

Mini DIN 4pin jack

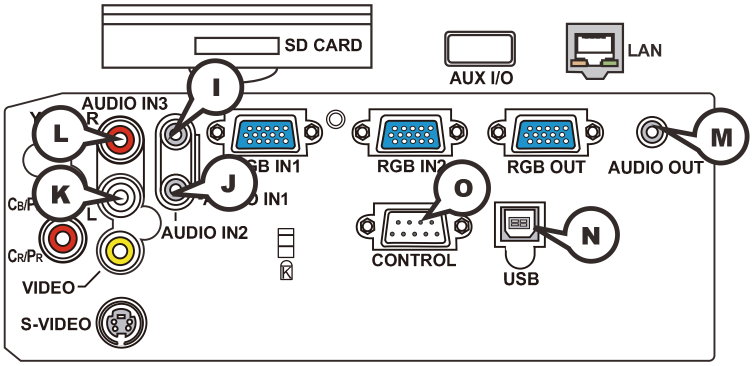


Pin	Signal
1	Color signal 0.286Vp-p (NTSC, burst), 75Ω terminator Color signal 0.300Vp-p (PAL/SECAM, burst) 75Ω terminator
2	Brightness signal, 1.0Vp-p, 75Ω terminator
3	Ground
4	Ground

ⒽVIDEO

RCA jack

- System: NTSC, PAL, SECAM, PAL-M, PAL-N, NTSC4.43
- 1.0±0.1Vp-p, 75Ω terminator


SD CARD
AUX I/O
LAN
AUDIO IN3
Y
R
L
I
K
J
CB/PB
L
CR/PR
VIDEO
S-VIDEO
RGB IN1
AUDIO IN1
AUDIO IN2
RGB IN2
O
CONTROL
RGB OUT
AUDIO OUT
M
USB
N

ⒾAUDIO IN-1 (Ø3.5 stereo mini jack), ⒿAUDIO IN-2,ⓀⓁAUDIO 3 L/R (RCA jack)

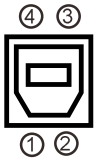
- 200mVrms(max.) 35kΩ termination

ⓂAUDIO OUT (Ø3.5 stereo mini jack)

- 200mVrms(max.) 1kΩ output impedance

ⓃUSB

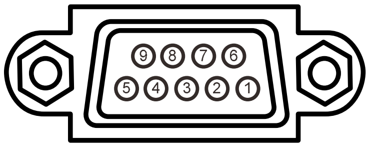
USB B type jack



Pin	Signal
1	+5V
2	- Data
3	+ Data
4	Ground

ⓄCONTROL

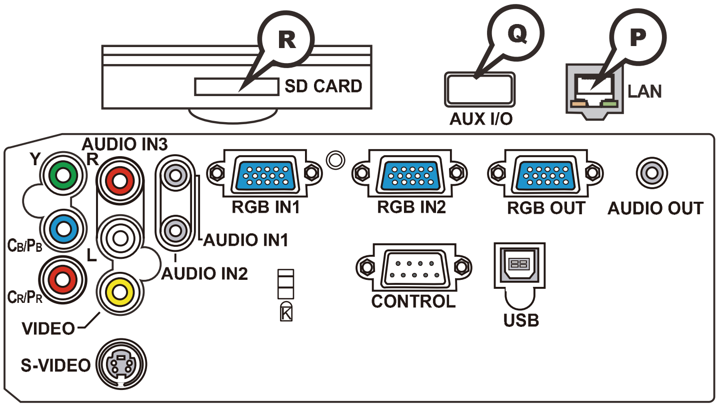
D-sub 9pin plug



- About the details of RS-232C communication, please refer to the following page.

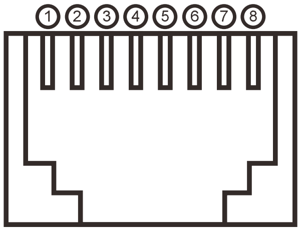
Pin	Signal	Pin	Signal	Pin	Signal
1	(No connection)	4	(No connection)	7	RTS
2	RD	5	Ground	8	CTS
3	TD	6	(No connection)	9	(No connection)

Connection to the ports


R
SD CARD
Q
AUX I/O
P
LAN
AUDIO IN3
Y
R
CB/PB
L
CR/PR
VIDEO
S-VIDEO
RGB IN1
AUDIO IN1
AUDIO IN2
RGB IN2
CONTROL
RGB OUT
USB
AUDIO OUT

ⓅLAN

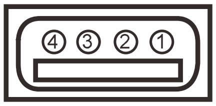
RJ-45 jack



Pin	Signal	Pin	Signal	Pin	Signal
1	TX+	4	-	7	-
2	TX-	5	-	8	-
3	RX+	6	RX-		

ⓆAUX I / O

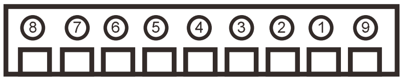
USB A type jack



Pin	Signal
1	+5V
2	- Data
3	+ Data
4	Ground

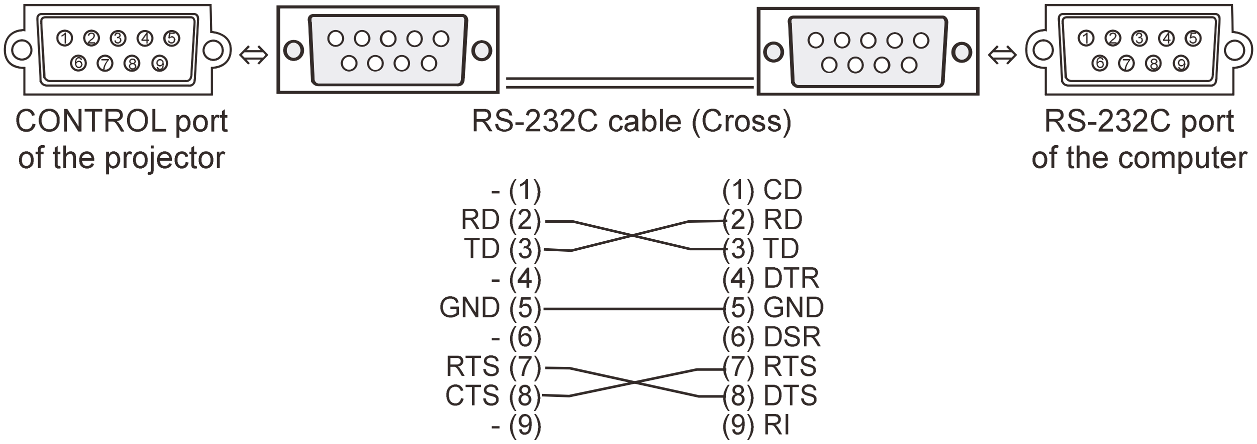
ⓇSD-CARD

SD CARD slot



Pin	Signal	Pin	Signal	Pin	Signal
1	CD/DAT3	4	VDD	7	DAT 0
2	CMD	5	CLK	8	DAT 1
3	VSS	6	VSS	9	DAT 2

RS-232C Communication


①②③④⑤
⑥⑦⑧⑨
⇔
⇔
①②③④⑤
⑥⑦⑧⑨
CONTROL port of the projector
RS-232C cable (Cross)
RS-232C port of the computer
- (1)
RD (2)
TD (3)
- (4)
GND (5)
- (6)
RTS (7)
CTS (8)
- (9)
(1) CD
(2) RD
(3) TD
(4) DTR
(5) GND
(6) DSR
(7) RTS
(8) DTS
(9) RI

Connecting the cable

1. Turn off the projector and the computer.
2. Connect the CONTROL port of the projector with a RS-232C port of the computer by a RS-232C cable (cross). Use the cable that fulfills the specification shown in the previous page.
3. Turn the computer on, and after the computer has started up turn the projector on.

Communications setting

19200bps, 8N1

1. Protocol

Consist of header (7 bytes) + command data (6 bytes).

2. Header

BE + EF + 03 + 06 + 00 + CRC_low + CRC_high
CRC_low : Lower byte of CRC flag for command data
CRC_high : Upper byte of CRC flag for command data

3. Command data

Command data chart

byte_0	byte_1	byte_2	byte_3	byte_4	byte_5
Action		Type		Setting code	
low	high	low	high	low	high

Action (byte_0 - 1)

Action	Classification	Content
1	SET	Change setting to desired value.
2	GET	Read projector internal setup value.
4	INCREMENT	Increment setup value by 1.
5	DECREMENT	Decrement setup value by 1.
6	EXECUTE	Run a command.

Requesting projector status (Get command)

(1) Send the request code Header + Command data (‘02H’+‘00H’+ type (2 bytes)+ ‘00H’ +‘00H’) from the computer to the projector.
(2) The projector returns the response code ‘1DH’+ data (2 bytes) to the computer.

Changing the projector settings (Set command)

(1) Send the setting code Header + Command data (‘01H’+‘00H’+ type (2 bytes) + setting code (2 bytes)) from the computer to the projector.
(2) The projector changes the setting based on the above setting code.
(3) The projector returns the response code ‘06H’ to the computer.

Using the projector default settings (Reset Command)

(1) The computer sends the default setting code Header + Command data (‘06H’+ ‘00H’ + type (2 bytes) +‘00H’+‘00H’) to the projector.
(2) The projector changes the specified setting to the default value.
(3) The projector returns the response code ‘06H’ to the computer.

Increasing the projector setting value (Increment command)

(1) The computer sends the increment code Header + Command data (‘04H’+ ‘00H’+ type (2 bytes) +‘00H’+‘00H’) to the projector.
(2) The projector in creases the setting value on the above setting code.
(3) The projector returns the response code ‘06H’ to the computer.

Decreasing the projector setting value (Decrement command)

(1) The computer sends the decrement code Header + Command data (‘05H’+ ‘00H’+ type (2 bytes) +‘00H’ + ‘00H’) to the projector.
(2) The projector decreases the setting value on the above setting code.
(3) The projector returns the response code ‘06H’ to the computer.

When the projector cannot understand the received command

When the projector cannot understand the received command, the error code ‘15H’ is sent back to the computer.

Sometimes the projector cannot properly receive the command. In such a case, the command is not executed and the error code ‘15H’ is sent back to the computer. If this error code is returned, send the same command again.

When the projector cannot execute the received command.

When the projector cannot execute the received command, the error code ‘1CH’ + ‘xxxxH’ is sent back to the computer. When the data length is greater than indicated by the data length code, the projector ignore the excess data code.

Conversely when the data length is shorter than indicated by the data length code, an error code will be returned to the computer.

NOTE • Operation cannot be guaranteed when the projector receives an undefined command or data.
• Provide an interval of at least 40ms between the response code and any other code.
• The projector outputs test data when the power supply is switched ON, and when the lamp is lit. Ignore this data.
• Commands are not accepted during warm-up.

Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
Power	Set	Turn off	BE EF	03	06 00	2A D3	01 00	00 60	00 00
		Turn on	BE EF	03	06 00	BA D2	01 00	00 60	01 00
	Get		BE EF	03	06 00	19 D3	02 00	00 60	00 00
			(Example return) 00 00 (Off) 01 00 (On) 02 00 (Cool down)						
Input Source	Set	RGB IN 1	BE EF	03	06 00	FE D2	01 00	00 20	00 00
		RGB IN 2	BE EF	03	06 00	3E D0	01 00	00 20	04 00
		VIDEO	BE EF	03	06 00	6E D3	01 00	00 20	01 00
		S-VIDEO	BE EF	03	06 00	9E D3	01 00	00 20	02 00
		COMPONENT	BE EF	03	06 00	AE D1	01 00	00 20	05 00
		MIU	BE EF	03	06 00	5E D1	01 00	00 20	06 00
	Get		BE EF	03	06 00	CD D2	02 00	00 20	00 00
Error Status	Get		BE EF	03	06 00	D9 D8	02 00	20 60	00 00
			(Example return) 00 00 (Normal) 01 00 (Cover error) 02 00 (Fan error) 03 00 (Lamp error) 04 00 (Temp error) 05 00 (Air flow error) 06 00 (Lamp time error) 07 00 (Cool error) 08 00 (Filter error)						
BRIGHTNESS	Get		BE EF	03	06 00	89 D2	02 00	03 20	00 00
	Increment		BE EF	03	06 00	EF D2	04 00	03 20	00 00
	Decrement		BE EF	03	06 00	3E D3	05 00	03 20	00 00
BRIGHTNESS Reset	Execute		BE EF	03	06 00	58 D3	06 00	00 70	00 00
CONTRAST	Get		BE EF	03	06 00	FD D3	02 00	04 20	00 00
	Increment		BE EF	03	06 00	9B D3	04 00	04 20	00 00
	Decrement		BE EF	03	06 00	4A D2	05 00	04 20	00 00
CONTRAST Reset	Execute		BE EF	03	06 00	A4 D2	06 00	01 70	00 00
PICTURE MODE	Set	NORMAL	BE EF	03	06 00	23 F6	01 00	BA 30	00 00
		CINEMA	BE EF	03	06 00	B3 F7	01 00	BA 30	01 00
		DYNAMIC	BE EF	03	06 00	E3 F4	01 00	BA 30	04 00
		BOARD(BLACK)	BE EF	03	06 00	E3 EF	01 00	BA 30	20 00
		BOARD(GREEN)	BE EF	03	06 00	73 EE	01 00	BA 30	21 00
		WHITEBOARD	BE EF	03	06 00	83 EE	01 00	BA 30	22 00
	Get		BE EF	03	06 00	10 F6	02 00	BA 30	00 00
			(Example return) 00 00 (Normal) 01 00 (Cinema) 04 00 (Dynamic) 10 00 (Custom) 20 00 BOARD(BLACK) 21 00 BOARD(GREEN) 22 00 (WHITEBOARD)						
GAMMA	Set	#1 DEFAULT	BE EF	03	06 00	07 E9	01 00	A1 30	20 00
		#1 CUSTOM	BE EF	03	06 00	07 FD	01 00	A1 30	10 00
		#2 DEFAULT	BE EF	03	06 00	97 E8	01 00	A1 30	21 00
		#2 CUSTOM	BE EF	03	06 00	97 FC	01 00	A1 30	11 00
		#3 DEFAULT	BE EF	03	06 00	67 E8	01 00	A1 30	22 00
		#3 CUSTOM	BE EF	03	06 00	67 FC	01 00	A1 30	12 00
		#4 DEFAULT	BE EF	03	06 00	F7 E9	01 00	A1 30	23 00
		#4 CUSTOM	BE EF	03	06 00	F7 FD	01 00	A1 30	13 00
		#5 DEFAULT	BE EF	03	06 00	C7 EB	01 00	A1 30	24 00
		#5 CUSTOM	BE EF	03	06 00	C7 FF	01 00	A1 30	14 00
	Get		BE EF	03	06 00	F4 F0	02 00	A1 30	00 00

RS-232C Communication (continued)

Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
User Gamma Pattern	Set	Off	BE EF	03	06 00	FB FA	01 00	80 30	00 00
		9 step gray scale	BE EF	03	06 00	6B FB	01 00	80 30	01 00
		15 steps gray scale	BE EF	03	06 00	9B FB	01 00	80 30	02 00
		Ramp	BE EF	03	06 00	0B FA	01 00	80 30	03 00
	Get		BE EF	03	06 00	C8 FA	02 00	80 30	00 00
User Gamma Point 1	Get		BE EF	03	06 00	08 FE	02 00	90 30	00 00
	Increment		BE EF	03	06 00	6E FE	04 00	90 30	00 00
	Decrement		BE EF	03	06 00	BF FF	05 00	90 30	00 00
User Gamma Point 2	Get		BE EF	03	06 00	F4 FF	02 00	91 30	00 00
	Increment		BE EF	03	06 00	92 FF	04 00	91 30	00 00
	Decrement		BE EF	03	06 00	43 FE	05 00	91 30	00 00
User Gamma Point 3	Get		BE EF	03	06 00	B0 FF	02 00	92 30	00 00
	Increment		BE EF	03	06 00	D6 FF	04 00	92 30	00 00
	Decrement		BE EF	03	06 00	07 FE	05 00	92 30	00 00
User Gamma Point 4	Get		BE EF	03	06 00	4C FE	02 00	93 30	00 00
	Increment		BE EF	03	06 00	2A FE	04 00	93 30	00 00
	Decrement		BE EF	03	06 00	FB FF	05 00	93 30	00 00
User Gamma Point 5	Get		BE EF	03	06 00	38 FF	02 00	94 30	00 00
	Increment		BE EF	03	06 00	5E FF	04 00	94 30	00 00
	Decrement		BE EF	03	06 00	8F FE	05 00	94 30	00 00
User Gamma Point 6	Get		BE EF	03	06 00	C4 FE	02 00	95 30	00 00
	Increment		BE EF	03	06 00	A2 FE	04 00	95 30	00 00
	Decrement		BE EF	03	06 00	73 FF	05 00	95 30	00 00
User Gamma Point 7	Get		BE EF	03	06 00	80 FE	02 00	96 30	00 00
	Increment		BE EF	03	06 00	E6 FE	04 00	96 30	00 00
	Decrement		BE EF	03	06 00	37 FF	05 00	96 30	00 00
User Gamma Point 8	Get		BE EF	03	06 00	7C FF	02 00	97 30	00 00
	Increment		BE EF	03	06 00	1A FF	04 00	97 30	00 00
	Decrement		BE EF	03	06 00	CB FE	05 00	97 30	00 00

COLOR TEMP	Set	LOW	BE EF	03	06 00	6B F4	01 00	B0 30	01 00
		MIDDLE	BE EF	03	06 00	9B F4	01 00	B0 30	02 00
		HIGH	BE EF	03	06 00	0B F5	01 00	B0 30	03 00
		Hi-BRIGHT-1	BE EF	03	06 00	3B F2	01 00	B0 30	08 00
		Hi-BRIGHT-2	BE EF	03	06 00	AB F3	01 00	B0 30	09 00
		CUSTOM-LOW	BE EF	03	06 00	AB F9	01 00	B0 30	11 00
		CUSTOM-MID	BE EF	03	06 00	5B F9	01 00	B0 30	12 00
		CUSTOM-HIGH	BE EF	03	06 00	CB F8	01 00	B0 30	13 00
		CUSTOM-Hi-BRIGHT-1	BE EF	03	06 00	FB FF	01 00	B0 30	18 00
		CUSTOM-Hi-BRIGHT-2	BE EF	03	06 00	6B FE	01 00	B0 30	19 00
	Get		BE EF	03	06 00	C8 F5	02 00	B0 30	00 00
COLOR TEMP GAIN R	Get		BE EF	03	06 00	34 F4	02 00	B1 30	00 00
	Increment		BE EF	03	06 00	52 F4	04 00	B1 30	00 00
	Decrement		BE EF	03	06 00	83 F5	05 00	B1 30	00 00

Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
COLOR TEMP GAIN G	Get		BE EF	03	06 00	70 F4	02 00	B2 30	00 00
	Increment		BE EF	03	06 00	16 F4	04 00	B2 30	00 00
	Decrement		BE EF	03	06 00	C7 F5	05 00	B2 30	00 00
COLOR TEMP GAIN B	Get		BE EF	03	06 00	8C F5	02 00	B3 30	00 00
	Increment		BE EF	03	06 00	EA F5	04 00	B3 30	00 00
	Decrement		BE EF	03	06 00	3B F4	05 00	B3 30	00 00
COLOR TEMP OFFSET R	Get		BE EF	03	06 00	04 F5	02 00	B5 30	00 00
	Increment		BE EF	03	06 00	62 F5	04 00	B5 30	00 00
	Decrement		BE EF	03	06 00	B3 F4	05 00	B5 30	00 00
COLOR TEMP OFFSET G	Get		BE EF	03	06 00	40 F5	02 00	B6 30	00 00
	Increment		BE EF	03	06 00	26 F5	04 00	B6 30	00 00
	Decrement		BE EF	03	06 00	F7 F4	05 00	B6 30	00 00
COLOR TEMP OFFSET B	Get		BE EF	03	06 00	BC F4	02 00	B7 30	00 00
	Increment		BE EF	03	06 00	DA F4	04 00	B7 30	00 00
	Decrement		BE EF	03	06 00	0B F5	05 00	B7 30	00 00

Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
COLOR	Get		BE EF	03	06 00	B5 72	02 00	02 22	00 00
	Increment		BE EF	03	06 00	D3 72	04 00	02 22	00 00
	Decrement		BE EF	03	06 00	02 73	05 00	02 22	00 00
COLOR Reset	Execute		BE EF	03	06 00	80 D0	06 00	0A 70	00 00
TINT	Get		BE EF	03	06 00	49 73	02 00	03 22	00 00
	Increment		BE EF	03	06 00	2F 73	04 00	03 22	00 00
	Decrement		BE EF	03	06 00	FE 72	05 00	03 22	00 00
TINT Reset	Execute		BE EF	03	06 00	7C D1	06 00	0B 70	00 00
SHARPNESS	Get		BE EF	03	06 00	F1 72	02 00	01 22	00 00
	Increment		BE EF	03	06 00	97 72	04 00	01 22	00 00
	Decrement		BE EF	03	06 00	46 73	05 00	01 22	00 00
SHARPNESS Reset	Execute		BE EF	03	06 00	C4 D0	06 00	09 70	00 00
PROGRESSIVE	Set	TURN OFF	BE EF	03	06 00	4A 72	01 00	07 22	00 00
		TV	BE EF	03	06 00	DA 73	01 00	07 22	01 00
		FILM	BE EF	03	06 00	2A 73	01 00	07 22	02 00
	Get		BE EF	03	06 00	79 72	02 00	07 22	00 00
VIDEO NR	Set	LOW	BE EF	03	06 00	26 72	01 00	06 22	01 00
		MIDDLE	BE EF	03	06 00	D6 72	01 00	06 22	02 00
		HIGH	BE EF	03	06 00	46 73	01 00	06 22	03 00
	Get		BE EF	03	06 00	85 73	02 00	06 22	00 00
MY MEMORY Load	Set	1	BE EF	03	06 00	0E D7	01 00	14 20	00 00
		2	BE EF	03	06 00	9E D6	01 00	14 20	01 00
		3	BE EF	03	06 00	6E D6	01 00	14 20	02 00
		4	BE EF	03	06 00	FE D7	01 00	14 20	03 00
MY MEMORY Save	Set	1	BE EF	03	06 00	F2 D6	01 00	15 20	00 00
		2	BE EF	03	06 00	62 D7	01 00	15 20	01 00
		3	BE EF	03	06 00	92 D7	01 00	15 20	02 00
		4	BE EF	03	06 00	02 D6	01 00	15 20	03 00

Names	Operation Type		Header			Command Data			
						CRC	Action	Type	Setting Code
ASPECT	Set	4:3	BE EF	03	06 00	9E D0	01 00	08 20	00 00
		16:9	BE EF	03	06 00	0E D1	01 00	08 20	01 00
		14:9	BE EF	03	06 00	CE D6	01 00	08 20	09 00
		SMALL	BE EF	03	06 00	FE D1	01 00	08 20	02 00
		NORMAL	BE EF	03	06 00	5E DD	01 00	08 20	10 00
	Get		BE EF	03	06 00	AD D0	02 00	08 20	00 00
OVER SCAN	Get		BE EF	03	06 00	91 70	02 00	09 22	00 00
	Increment		BE EF	03	06 00	F7 70	04 00	09 22	00 00
	Decrement		BE EF	03	06 00	26 71	05 00	09 22	00 00
OVER SCAN Reset	Execute		BE EF	03	06 00	EC D9	06 00	27 70	00 00
V POSITION	Get		BE EF	03	06 00	0D 83	02 00	00 21	00 00
	Increment		BE EF	03	06 00	6B 83	04 00	00 21	00 00
	Decrement		BE EF	03	06 00	BA 82	05 00	00 21	00 00
V POSITION Reset	Execute		BE EF	03	06 00	E0 D2	06 00	02 70	00 00
H POSITION	Get		BE EF	03	06 00	F1 82	02 00	01 21	00 00
	Increment		BE EF	03	06 00	97 82	04 00	01 21	00 00
	Decrement		BE EF	03	06 00	46 83	05 00	01 21	00 00
H POSITION Reset	Execute		BE EF	03	06 00	1C D3	06 00	03 70	00 00
H PHASE	Get		BE EF	03	06 00	49 83	02 00	03 21	00 00
	Increment		BE EF	03	06 00	2F 83	04 00	03 21	00 00
	Decrement		BE EF	03	06 00	FE 82	05 00	03 21	00 00
H SIZE	Get		BE EF	03	06 00	B5 82	02 00	02 21	00 00
	Increment		BE EF	03	06 00	D3 82	04 00	02 21	00 00
	Decrement		BE EF	03	06 00	02 83	05 00	02 21	00 00
H SIZE Reset	Execute		BE EF	03	06 00	68 D2	06 00	04 70	00 00
AUTO ADJUST	Execute		BE EF	03	06 00	91 D0	06 00	0A 20	00 00
COLOR SPACE	Set	AUTO	BE EF	03	06 00	0E 72	01 00	04 22	00 00
		RGB	BE EF	03	06 00	9E 73	01 00	04 22	01 00
		SMPTE240	BE EF	03	06 00	6E 73	01 00	04 22	02 00
		REC709	BE EF	03	06 00	FE 72	01 00	04 22	03 00
		REC601	BE EF	03	06 00	CE 70	01 00	04 22	04 00
	Get		BE EF	03	06 00	3D 72	02 00	04 22	00 00
COMPONENT	Set	COMPONENT	BE EF	03	06 00	4A D7	01 00	17 20	00 00
		SCART RGB	BE EF	03	06 00	DA D6	01 00	17 20	01 00
	Get		BE EF	03	06 00	79 D7	02 00	17 20	00 00
C-VIDEO FORMAT	Set	AUTO	BE EF	03	06 00	A2 70	01 00	11 22	0A 00
		NTSC	BE EF	03	06 00	C2 74	01 00	11 22	04 00
		PAL	BE EF	03	06 00	52 75	01 00	11 22	05 00
		SECAM	BE EF	03	06 00	52 70	01 00	11 22	09 00
		NTSC4.43	BE EF	03	06 00	62 77	01 00	11 22	02 00
		M-PAL	BE EF	03	06 00	C2 71	01 00	11 22	08 00
		N-PAL	BE EF	03	06 00	32 74	01 00	11 22	07 00
	Get		BE EF	03	06 00	31 76	02 00	11 22	00 00
S-VIDEO FORMAT	Set	AUTO	BE EF	03	06 00	E6 70	01 00	12 22	0A 00
		NTSC	BE EF	03	06 00	86 74	01 00	12 22	04 00
		PAL	BE EF	03	06 00	16 75	01 00	12 22	05 00
		SECAM	BE EF	03	06 00	16 70	01 00	12 22	09 00
		NTSC4.43	BE EF	03	06 00	26 77	01 00	12 22	02 00
		M-PAL	BE EF	03	06 00	86 71	01 00	12 22	08 00
		N-PAL	BE EF	03	06 00	76 74	01 00	12 22	07 00
	Get		BE EF	03	06 00	75 76	02 00	12 22	00 00

Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
FRAME LOCK	Set	TURN OFF	BE EF	03	06 00	CB D6	01 00	14 30	00 00
		TURN ON	BE EF	03	06 00	5B D7	01 00	14 30	01 00
	Get		BE EF	03	06 00	F8 D6	02 00	14 30	00 00
RGB1 IN-1	Set	SYNC ON G OFF	BE EF	03	06 00	5E D7	01 00	10 20	02 00
		SYNC ON G ON	BE EF	03	06 00	CE D6	01 00	10 20	03 00
	Get		BE EF	03	06 00	0D D6	02 00	10 20	00 00
RGB IN-2	Set	SYNC ON G OFF	BE EF	03	06 00	A2 D6	01 00	11 20	02 00
		SYNC ON G ON	BE EF	03	06 00	32 D7	01 00	11 20	03 00
	Get		BE EF	03	06 00	F1 D7	02 00	11 20	00 00
KEYSTONE V	Get		BE EF	03	06 00	B9 D3	02 00	07 20	00 00
	Increment		BE EF	03	06 00	DF D3	04 00	07 20	00 00
	Decrement		BE EF	03	06 00	0E D2	05 00	07 20	00 00
KEYSTONE V Reset	Execute		BE EF	03	06 00	08 D0	06 00	0C 70	00 00
WHISPER	Set	NORMAL	BE EF	03	06 00	3B 23	01 00	00 33	00 00
		WHISPER	BE EF	03	06 00	AB 22	01 00	00 33	01 00
	Get		BE EF	03	06 00	08 23	02 00	00 33	00 00
MIRROR	Set	NORMAL	BE EF	03	06 00	C7 D2	01 00	01 30	00 00
		H:INVERT	BE EF	03	06 00	57 D3	01 00	01 30	01 00
		V:INVERT	BE EF	03	06 00	A7 D3	01 00	01 30	02 00
		H&V:INVERT	BE EF	03	06 00	37 D2	01 00	01 30	03 00
	Get		BE EF	03	06 00	F4 D2	02 00	01 30	00 00
AUDIO - RGB1	Set	TURN OFF	BE EF	03	06 00	FE DD	01 00	30 20	00 00
		Audio1	BE EF	03	06 00	6E DC	01 00	30 20	01 00
		Audio2	BE EF	03	06 00	9E DC	01 00	30 20	02 00
		Audio3	BE EF	03	06 00	0E DD	01 00	30 20	03 00
	Get		BE EF	03	06 00	CD DD	02 00	30 20	00 00
AUDIO - RGB2	Set	TURN OFF	BE EF	03	06 00	CE DC	01 00	34 20	00 00
		Audio1	BE EF	03	06 00	5E DD	01 00	34 20	01 00
		Audio2	BE EF	03	06 00	AE DD	01 00	34 20	02 00
		Audio3	BE EF	03	06 00	3E DC	01 00	34 20	03 00
	Get		BE EF	03	06 00	FD DC	02 00	34 20	00 00
AUDIO - Video	Set	TURN OFF	BE EF	03	06 00	02 DC	01 00	31 20	00 00
		Audio1	BE EF	03	06 00	92 DD	01 00	31 20	01 00
		Audio2	BE EF	03	06 00	62 DD	01 00	31 20	02 00
		Audio3	BE EF	03	06 00	F2 DC	01 00	31 20	03 00
	Get		BE EF	03	06 00	31 DC	02 00	31 20	00 00
AUDIO - S-Video	Set	TURN OFF	BE EF	03	06 00	46 DC	01 00	32 20	00 00
		Audio1	BE EF	03	06 00	D6 DD	01 00	32 20	01 00
		Audio2	BE EF	03	06 00	26 DD	01 00	32 20	02 00
		Audio3	BE EF	03	06 00	B6 DC	01 00	32 20	03 00
	Get		BE EF	03	06 00	75 DC	02 00	32 20	00 00
AUDIO - Component	Set	TURN OFF	BE EF	03	06 00	32 DD	01 00	35 20	00 00
		Audio1	BE EF	03	06 00	A2 DC	01 00	35 20	01 00
		Audio2	BE EF	03	06 00	52 DC	01 00	35 20	02 00
		Audio3	BE EF	03	06 00	C2 DD	01 00	35 20	03 00
	Get		BE EF	03	06 00	01 DD	02 00	35 20	00 00
AUDIO - MIU	Set	TURN OFF	BE EF	03	06 00	76 DD	01 00	36 20	00 00
		Audio1	BE EF	03	06 00	E6 DC	01 00	36 20	01 00
		Audio2	BE EF	03	06 00	16 DC	01 00	36 20	02 00
		Audio3	BE EF	03	06 00	86 DD	01 00	36 20	03 00
		Audio_MIU	BE EF	03	06 00	B6 D0	01 00	36 20	10 00
	Get		BE EF	03	06 00	45 DD	02 00	36 20	00 00

RS-232C Communication (continued)

Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
MUTE	Set	TURN OFF	BE EF	03	06 00	46 D3	01 00	02 20	00 00
		TURN ON	BE EF	03	06 00	D6 D2	01 00	02 20	01 00
	Get		BE EF	03	06 00	75 D3	02 00	02 20	00 00
LANGUAGE	Set	ENGLISH	BE EF	03	06 00	F7 D3	01 00	05 30	00 00
		FRANÇAIS	BE EF	03	06 00	67 D2	01 00	05 30	01 00
		DEUTSCH	BE EF	03	06 00	97 D2	01 00	05 30	02 00
		ESPAÑOL	BE EF	03	06 00	07 D3	01 00	05 30	03 00
		ITALIANO	BE EF	03	06 00	37 D1	01 00	05 30	04 00
		NORSK	BE EF	03	06 00	A7 D0	01 00	05 30	05 00
		NEDERLANDS	BE EF	03	06 00	57 D0	01 00	05 30	06 00
		PORTUGUÊS	BE EF	03	06 00	C7 D1	01 00	05 30	07 00
		日本語	BE EF	03	06 00	37 D4	01 00	05 30	08 00
		简体中文	BE EF	03	06 00	A7 D5	01 00	05 30	09 00
		繁體中文	BE EF	03	06 00	37 DE	01 00	05 30	10 00
		한글	BE EF	03	06 00	57 D5	01 00	05 30	0A 00
		SVENSKA	BE EF	03	06 00	C7 D4	01 00	05 30	0B 00
		РУССКИЙ	BE EF	03	06 00	F7 D6	01 00	05 30	0C 00
		SUOMI	BE EF	03	06 00	67 D7	01 00	05 30	0D 00
		POLSKI	BE EF	03	06 00	97 D7	01 00	05 30	0E 00
		TÜRKÇE	BE EF	03	06 00	07 D6	01 00	05 30	0F 00
	Get		BE EF	03	06 00	C4 D3	02 00	05 30	00 00
MENU POSITION H	Get		BE EF	03	06 00	04 D7	02 00	15 30	00 00
	Increment		BE EF	03	06 00	62 D7	04 00	15 30	00 00
	Decrement		BE EF	03	06 00	B3 D6	05 00	15 30	00 00
MENU POSITION H Reset	Execute		BE EF	03	06 00	DC C6	06 00	43 70	00 00
MENU POSITION V	Get		BE EF	03	06 00	40 D7	02 00	16 30	00 00
	Increment		BE EF	03	06 00	26 D7	04 00	16 30	00 00
	Decrement		BE EF	03	06 00	F7 D6	05 00	16 30	00 00
MENU POSITION V Reset	Execute		BE EF	03	06 00	A8 C7	06 00	44 70	00 00

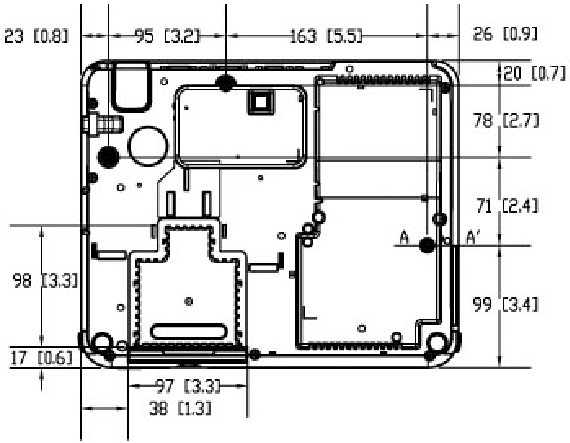
Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
BLANK	Set	My Screen	BE EF	03	06 00	FB CA	01 00	00 30	20 00
		ORIGINAL	BE EF	03	06 00	FB E2	01 00	00 30	40 00
		BLUE	BE EF	03	06 00	CB D3	01 00	00 30	03 00
		WHITE	BE EF	03	06 00	6B D0	01 00	00 30	05 00
		BLACK	BE EF	03	06 00	9B D0	01 00	00 30	06 00
	Get		BE EF	03	06 00	08 D3	02 00	00 30	00 00
BLANK On/Off	Set	TURN OFF	BE EF	03	06 00	FB D8	01 00	20 30	00 00
		TURN ON	BE EF	03	06 00	6B D9	01 00	20 30	01 00
	Get		BE EF	03	06 00	C8 D8	02 00	20 30	00 00
START UP	Set	My Screen	BE EF	03	06 00	CB CB	01 00	04 30	20 00
		ORIGINAL	BE EF	03	06 00	0B D2	01 00	04 30	00 00
		TURN OFF	BE EF	03	06 00	9B D3	01 00	04 30	01 00
	Get		BE EF	03	06 00	38 D2	02 00	04 30	00 00
My Screen LOCK	Set	TURN OFF	BE EF	03	06 00	3B EF	01 00	C0 30	00 00
		TURN ON	BE EF	03	06 00	AB EE	01 00	C0 30	01 00
	Get		BE EF	03	06 00	08 EF	02 00	C0 30	00 00
MESSAGE	Set	TURN OFF	BE EF	03	06 00	8F D6	01 00	17 30	00 00
		TURN ON	BE EF	03	06 00	1F D7	01 00	17 30	01 00
	Get		BE EF	03	06 00	BC D6	02 00	17 30	00 00
AUTO SEARCH	Set	TURN OFF	BE EF	03	06 00	B6 D6	01 00	16 20	00 00
		TURN ON	BE EF	03	06 00	26 D7	01 00	16 20	01 00
	Get		BE EF	03	06 00	85 D6	02 00	16 20	00 00
AUTO ON	Set	TURN OFF	BE EF	03	06 00	3B 89	01 00	20 31	00 00
		TURN ON	BE EF	03	06 00	AB 88	01 00	20 31	01 00
	Get		BE EF	03	06 00	08 89	02 00	20 31	00 00
AUTO KEYSTONE EXECUTE	Execute		BE EF	03	06 00	E5 D1	06 00	0D 20	00 00
AUTO KEYSTONE	Set	TURN OFF	BE EF	03	06 00	EA D1	01 00	0F 20	00 00
		TURN ON	BE EF	03	06 00	7A D0	01 00	0F 20	01 00
	Get		BE EF	03	06 00	D9 D1	02 00	0F 20	00 00
AUTO OFF	Get		BE EF	03	06 00	08 86	02 00	10 31	00 00
	Increment		BE EF	03	06 00	6E 86	04 00	10 31	00 00
	Decrement		BE EF	03	06 00	BF 87	05 00	10 31	00 00
LAMP TIME	Get		BE EF	03	06 00	C2 FF	02 00	90 10	00 00
LAMP TIME Reset	Execute		BE EF	03	06 00	58 DC	06 00	30 70	00 00
FILTER TIME	Get		BE EF	03	06 00	C2 F0	02 00	A0 10	00 00
FILER TIME Reset	Execute		BE EF	03	06 00	98 C6	06 00	40 70	00 00
MAGNIFY	Get		BE EF	03	06 00	7C D2	02 00	07 30	00 00
	Increment		BE EF	03	06 00	1A D2	04 00	07 30	00 00
	Decrement		BE EF	03	06 00	CB D3	05 00	07 30	00 00
FREEZE	Set	NORMAL	BE EF	03	06 00	83 D2	01 00	02 30	00 00
		FREEZE	BE EF	03	06 00	13 D3	01 00	02 30	01 00
	Get		BE EF	03	06 00	B0 D2	02 00	02 30	00 00

RS-232C Communication (continued)

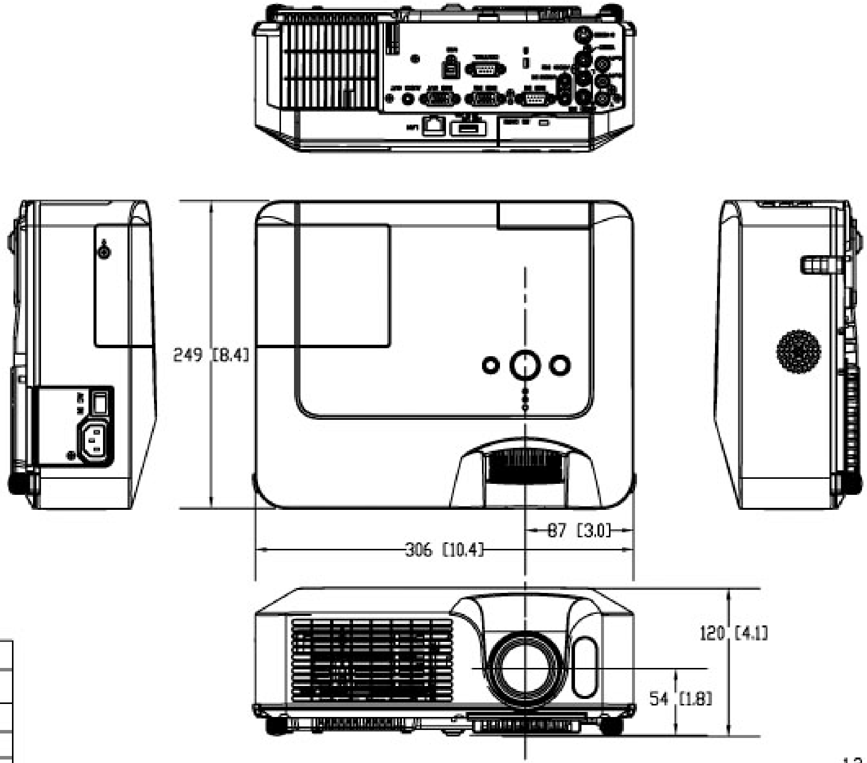
Names	Operation Type		Header				Command Data		
						CRC	Action	Type	Setting Code
REMOTE FREQ NORMAL	Set	Disable	BE EF	03	06 00	FF 3D	01 00	30 26	00 00
		Enable	BE EF	03	06 00	6F 3C	01 00	30 26	01 00
	Get		BE EF	03	06 00	CC 3D	02 00	30 26	00 00
REMOTE FREQ HIGH	Set	Disable	BE EF	03	06 00	03 3C	01 00	31 26	00 00
		Enable	BE EF	03	06 00	93 3D	01 00	31 26	01 00
	Get		BE EF	03	06 00	30 3C	02 00	31 26	00 00
MY BUTTON-1	Set	RGB1	BE EF	03	06 00	3A 33	01 00	00 36	00 00
		RGB2	BE EF	03	06 00	FA 31	01 00	00 36	04 00
		COMPONENT	BE EF	03	06 00	6A 30	01 00	00 36	05 00
		S-VIDEO	BE EF	03	06 00	5A 32	01 00	00 36	02 00
		Video	BE EF	03	06 00	AA 32	01 00	00 36	01 00
		MIU	BE EF	03	06 00	9A 30	01 00	00 36	06 00
		INFORMATION	BE EF	03	06 00	FA 3E	01 00	00 36	10 00
		AUTO KEYSTONE EXECUTE	BE EF	03	06 00	6A 3F	01 00	00 36	11 00
		MY MEMORY	BE EF	03	06 00	9A 3F	01 00	00 36	12 00
		PICTURE MODE	BE EF	03	06 00	0A 3E	01 00	00 36	13 00
		FILTER RESET	BE EF	03	06 00	3A 3C	01 00	00 36	14 00
		e-SHOT	BE EF	03	06 00	5A 3D	01 00	00 36	16 00
		VOLUME+	BE EF	03	06 00	CA 3C	01 00	00 36	17 00
		VOLUME-	BE EF	03	06 00	3A 39	01 00	00 36	18 00
	Get		BE EF	03	06 00	09 33	02 00	00 36	00 00
MY BUTTON-2	Set	RGB1	BE EF	03	06 00	C6 32	01 00	01 36	00 00
		RGB2	BE EF	03	06 00	06 30	01 00	01 36	04 00
		COMPONENT	BE EF	03	06 00	96 31	01 00	01 36	05 00
		S-VIDEO	BE EF	03	06 00	A6 33	01 00	01 36	02 00
		Video	BE EF	03	06 00	56 33	01 00	01 36	01 00
		MIU	BE EF	03	06 00	66 31	01 00	01 36	06 00
		INFORMATION	BE EF	03	06 00	06 3F	01 00	01 36	10 00
		AUTO KEYSTONE EXECUTE	BE EF	03	06 00	96 3E	01 00	01 36	11 00
		MY MEMORY	BE EF	03	06 00	66 3E	01 00	01 36	12 00
		PICTURE MODE	BE EF	03	06 00	F6 3F	01 00	01 36	13 00
		FILTER RESET	BE EF	03	06 00	C6 3D	01 00	01 36	14 00
		e-SHOT	BE EF	03	06 00	A6 3C	01 00	01 36	16 00
		VOLUME+	BE EF	03	06 00	36 3D	01 00	01 36	17 00
		VOLUME-	BE EF	03	06 00	C6 38	01 00	01 36	18 00
	Get		BE EF	03	06 00	F5 32	02 00	01 36	00 00

Names	Operation Type	Header				Command Data		
					CRC	Action	Type	Setting Code
VOLUME-RGB1	Get	BE EF	03	06 00	CD CC	02 00	60 20	00 00
	Increment	BE EF	03	06 00	AB CC	04 00	60 20	00 00
	Decrement	BE EF	03	06 00	7A CD	05 00	60 20	00 00
VOLUME-RGB2	Get	BE EF	03	06 00	FD CD	02 00	64 20	00 00
	Increment	BE EF	03	06 00	9B CD	04 00	64 20	00 00
	Decrement	BE EF	03	06 00	4A CC	05 00	64 20	00 00
VOLUME-Video	Get	BE EF	03	06 00	31 CD	02 00	61 20	00 00
	Increment	BE EF	03	06 00	57 CD	04 00	61 20	00 00
	Decrement	BE EF	03	06 00	86 CC	05 00	61 20	00 00
VOLUME-S-Video	Get	BE EF	03	06 00	75 CD	02 00	62 20	00 00
	Increment	BE EF	03	06 00	13 CD	04 00	62 20	00 00
	Decrement	BE EF	03	06 00	C2 CC	05 00	62 20	00 00
VOLUME-Component	Get	BE EF	03	06 00	01 CC	02 00	65 20	00 00
	Increment	BE EF	03	06 00	67 CC	04 00	65 20	00 00
	Decrement	BE EF	03	06 00	B6 CD	05 00	65 20	00 00
VOLUME-MIU	Get	BE EF	03	06 00	45 CC	02 00	66 20	00 00
	Increment	BE EF	03	06 00	23 CC	04 00	66 20	00 00
	Decrement	BE EF	03	06 00	F2 CD	05 00	66 20	00 00

8776-W

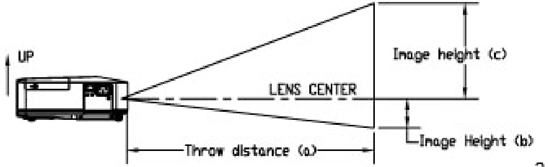


23 [0.8]
95 [3.2]
163 [5.5]
26 [0.9]
20 [0.7]
78 [2.7]
71 [2.4]
A
A'
99 [3.4]
98 [3.3]
17 [0.6]
97 [3.3]
38 [1.3]

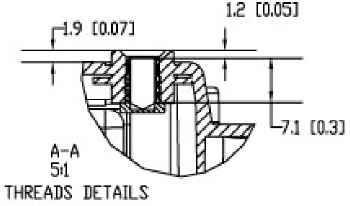


249 [8.4]
87 [3.0]
306 [10.4]
120 [4.1]
54 [1.8]

<table>
<tr><th rowspan="3">Screen size(4:3 Diagonal) inch</th><th colspan="4">8776-W</th></tr>
<tr><th rowspan="2">Image height(b) inch(cm)</th><th rowspan="2">Image height(c) inch(cm)</th><th colspan="2">Throw distance (a) inch(m)</th></tr>
<tr><th>Min</th><th>Max</th></tr>
<tr><td>30"</td><td>2"(5)</td><td>16"(41)</td><td>34"(0.9)</td><td>41"(1.1)</td></tr>
<tr><td>40"</td><td>2"(6)</td><td>22"(55)</td><td>46"(1.2)</td><td>56"(1.4)</td></tr>
<tr><td>60"</td><td>4"(9)</td><td>32"(82)</td><td>70"(1.8)</td><td>84"(2.1)</td></tr>
<tr><td>80"</td><td>5"(12)</td><td>43"(110)</td><td>93"(2.4)</td><td>112"(2.8)</td></tr>
<tr><td>100"</td><td>6"(15)</td><td>54"(137)</td><td>117"(3.0)</td><td>140"(3.6)</td></tr>
<tr><td>120"</td><td>7"(18)</td><td>65"(165)</td><td>140"(3.6)</td><td>169"(4.3)</td></tr>
<tr><td>150"</td><td>9"(23)</td><td>81"(206)</td><td>176"(4.5)</td><td>211"(5.4)</td></tr>
<tr><td>200"</td><td>12"(30)</td><td>108"(274)</td><td>234"(6.0)</td><td>282"(7.2)</td></tr>
<tr><td>250"</td><td>15"(38)</td><td>135"(343)</td><td>293"(7.5)</td><td>352"(8.9)</td></tr>
<tr><td>300"</td><td>18"(46)</td><td>162"(411)</td><td>352"(8.9)</td><td>423"(10.7)</td></tr>
</table>



UP
LENS CENTER
Image height (c)
Image Height (b)
Throw distance (a)

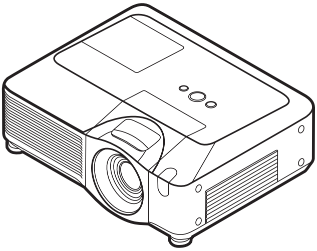


1.9 [0.07]
1.2 [0.05]
7.1 [0.3]
A-A
5:1
3 THREADS DETAILS

Projector

8776-W

User's Manual – Network Functions Section



This section is only intended to explain Network Functions.

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http://www.hitachi.us/digitalmedia
or
http://www.hitachidigitalmedia.com

Contents

Caution 3

1. Main Functions 5

- 1.1 Live Mode 5
- 1.2 PC-LESS Presentation 6

2. Equipment connection and network setting 8

- 2.1 Required equipment preparation 8
- 2.2 Network connection using “One-Click-Communication” function 8
- 2.3 Manual network connection setting – Wired LAN - 10
  - 2.3.1 Equipments connection 10
  - 2.3.2 Network settings 11
  - 2.3.3 “Internet Option” setting 14
  - 2.3.4 Check connection 15
- 2.4 Manual network connection setting – For wireless LAN - 16
  - 2.4.1 Preparation for wireless LAN connection 16
  - 2.4.2 Wireless LAN connection set up 17
- 2.5 Configuring and Controlling the projector via a web browser 19
  - 2.5.1 Network Information 22
  - 2.5.2 Network Settings 23
  - 2.5.3 Port Settings 25
  - 2.5.4 Mail Settings 26
  - 2.5.5 Alert Settings 27
  - 2.5.6 Schedule Settings 32
  - 2.5.7 Date/Time Settings 34
  - 2.5.8 Security Settings 36
  - 2.5.9 Projector Control 38
  - 2.5.10 Projector Status 41
  - 2.5.11 Network Restart 41
  - 2.5.12 Logoff 41
- 2.6 Utilize Web Remote Control 42

3. How to use Projector software – Basics - 44

- 3.1 How to use “MIU Live Viewer” 44
  - 3.1.1 Install “MIU Live Viewer” 44
  - 3.1.2 Software Installation Procedure 45
  - 3.1.3 Explanation of “MIU Live Viewer” 46
  - 3.1.4 Utilize “MIU Live Viewer” – Basic - 50
- 3.2 Utilize “PC-LESS Presentation” – Basic - 52

4. Utilize projector – Advanced - 54

- 4.1 Utilize “MIU Live Viewer” – Advanced - 54
  - 4.1.1 Connect multiple PCs with one projector (Multiple PCs connection) 54
- 4.2 Utilize “PC-LESS Presentation” – Advanced - 56
  - 4.2.1 Thumbnail display 57
  - 4.2.2 Display in full screen 59
  - 4.2.3 Slide show 61
  - 4.2.4 Directory display 63
  - 4.2.5 “PC-LESS Presentation” error message 66
- 4.3 Playlist 67
- 4.4 Failure & Warning Alerts via E-mail 68
- 4.5 Projector management via SNMP 70
- 4.6 Controlling the Projector via Scheduling 71
- 4.7 e-SHOT (Still Image Transfer) Display 74
- 4.8 Command Control via the Network 75

5. Troubleshooting 80

6. Specifications 82

7. Warranty and After-sales service 83

Caution

[Restriction in terms of inserts or pulls memory card and wireless LAN card]
Do not pull out the memory card and the wireless card while the power is on. The memory card can be pulled out only while the card access LED (Red) is off.

⚠ CAUTION

■The accompanying 802.11g wireless LAN card uses the 2.4GHz radio frequency band. You do not need a radio license to use this card, but you should be aware of the following:

●DO NOT USE NEAR THE FOLLOWING!
- Microwave ovens
- Industrial, scientific or medical devices
- Designated low power radio stations
- Premises radio stations

Using the wireless LAN card near the above may result in radio interference, which in turn may result in a decrease in communication speed and even a complete loss of communication.

●Depending on the location where you attempt to use the wireless LAN card, there may be interference with the radio waves, which may result in a decrease in communication speed and even a complete loss of communication. In particular, please be aware that using the wireless LAN card in locations where there is reinforced steel, other metals and concrete may interfere with radio communication.

●Available Channels
The wireless LAN card uses the 2.4GHz radio frequency band, but depending on the country or region you are in, you might be limited to the channels you can use. Please refer to the following table for confirming where and with what channels you may use the accompanying 802.11g wireless LAN card. Please consult with your dealer for countries not included in the table.

Country or Region	Available Channel
Japan	1 to 11
USA	1 to 11
Taiwan	1 to 11
Canada	1 to 11
UK, Spain, Germany, Italy, Austria, Switzerland, Belgium, Sweden, Netherlands, Portugal, Denmark, Finland, Greece, Norway, France, Ireland, Luxembourg, Iceland	1 to 11

●You may not bring the wireless LAN card into countries not listed above as there is a possibility that use of the wireless LAN card in those countries could lead to an infringement of established radio laws.

1. Main functions

1.1 Live Mode (Project images from PC)

The main function of MIU (Multi Information processing Unit) is the Live Mode.
On Live Mode, the projector displays the screen appearing on the PC via network, supported by “MIU Live Viewer” (Fig.1.1.a).
The “MIU Live Viewer” captures PC screen image using dedicated firmware “MIU Live Viewer” and sends it to projector through wired LAN or wireless LAN connection. (Refer to section 3 and 5 in detail.)

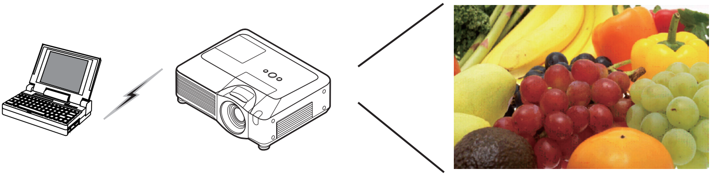
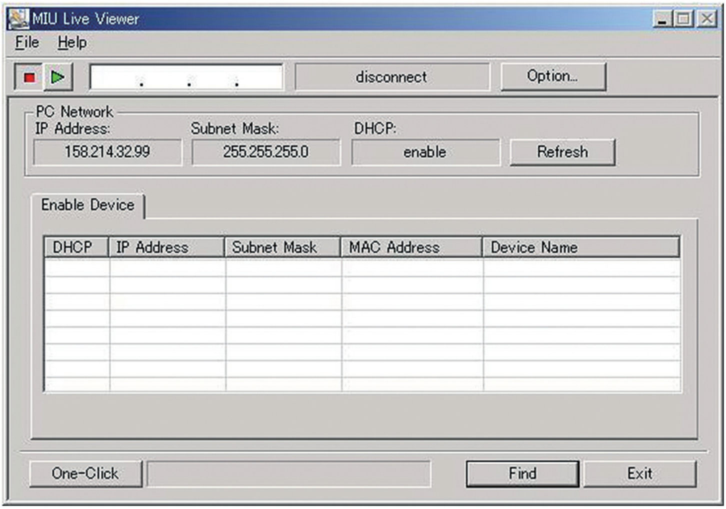


Fig. 1.1.a “MIU Live Viewer” outlines (through wireless LAN connection)


MIU Live Viewer
File
Help
disconnect
Option...
PC Network
Refresh
Enable Device
DHCP
IP Address
Subnet Mask
MAC Address
Device Name
One-Click
Find
Exit

IP Address: 158.214.32.99
Subnet Mask: 255.255.255.0
DHCP: enable

Fig. 1.1.b “MIU Live Viewer”

One projector can be connected with up to 4 PCs using “MIU Live Viewer”.
(Refer to section 4.1 in detail.)

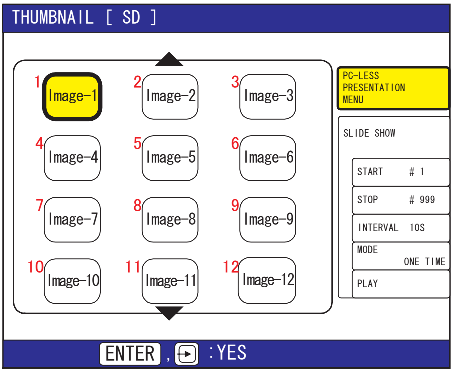
1.2 PC-LESS Presentation (Display the images stored in SD card/USB memory.)

Other main function is “PC-LESS Presentation”. (Fig. 1.2.a) “PC-LESS Presentation” has 4 kinds of display modes.

1) Thumbnail display: Display many stored images in SD card and USB memory at once. (From now on, it is called “memory card” as SD card and USB memory combined.)
2) Display in full screen: Display 1 picture or moving picture in full screen.
3) Slide show: Switch images with set intervals.
4) Directory display: Display directories and files stored in memory card as listed.

[Supported memory cards]

- SD card
- USB memory (USB memory type, USB Hard Disk and USB card reader type)

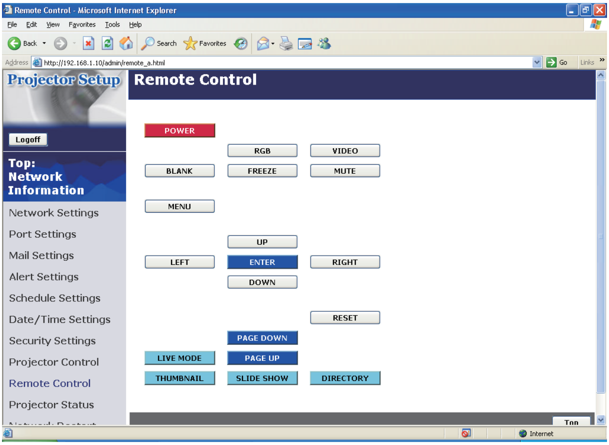

THUMBNAIL [SD]
1 Image-1
2 Image-2
3 Image-3
4 Image-4
5 Image-5
6 Image-6
7 Image-7
8 Image-8
9 Image-9
10 Image-10
11 Image-11
12 Image-12
PC-LESS PRESENTATION MENU
SLIDE SHOW
PLAY
ENTER , ⊡ :YES

START # 1
STOP # 999
INTERVAL 10S
MODE ONE TIME

Fig. 1.2.a “PC-LESS Presentation” outlines

“PC-LESS Presentation” can be controlled via keypad on the Projector or IR Remote (refer 4.2 Utilize PC-LESS Presentation -Advanced).
You can also use “Remote Control” as shown in fig. 1.2.b, which enables selecting images, switching pages and switching display modes. “Remote Control” also switches mode between “MIU Live Viewer” and “PC-LESS Presentation”.

1.2 PC-LESS Presentation (Display the images stored in SD card/USB memory.) (Continued)



Address http://192.168.1.10/admin/remote_a.html

Remote Control - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Go Links
Projector Setup
Remote Control
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
POWER
RGB
VIDEO
BLANK
FREEZE
MUTE
MENU
UP
LEFT
ENTER
RIGHT
DOWN
RESET
PAGE DOWN
LIVE MODE
PAGE UP
THUMBNAIL
SLIDE SHOW
DIRECTORY
Top
Internet

Fig. 1.2.b Remote Control

NOTE • There are following limitations for file name and directory name in PC-LESS Presentation.

(1) The projector's language setting is Japanese.
Only alpha-numeric characters and Japanese are supported.

(2) The projector's language setting is not Japanese.
Only alpha-numeric characters and Latin-1 characters are supported.

• Data cannot be read correctly depending on the type of USB hard disk, USB memory and USB card reader.

• When your USB hard disk can use a DC power supply adapter, please use it.

2. Equipment connection and network setting

2.1 Required equipment preparation

Followings are required for 1 projector and 1 PC connection. Multiple PC connection is described in section 4.1.

Projector: 1 unit
PC: 1 set ("MIU Live Viewer" installation is required for "MIU Live Viewer" usage.)
IEEE802.g wireless LAN equipment is required.
Depending on the type of wireless LAN card and PC you are using, the projector may not be able to communicate properly with your PC, even if the PC you are using is equipped with built-in wireless LAN function. To eliminate communication problems, please procure a Wi-Fi certified wireless LAN card.
LAN cable (in case of wired connection): 1 piece * 1
SD Wireless Network Card (in case of wireless connection): 1 unit * 2
Memory card (in case of "PC-LESS Presentation" usage): 1 piece
* 1: When a projector and a PC are connected, use CAT-5 LAN cable.
* 2: Access point is required when wireless LAN connection is used as Infrastructure mode.

2.2 Network connection using "One-Click-Communication" function

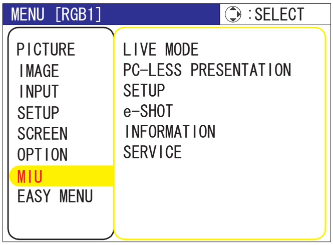
This section explains how to connect network using "One-Click-Communication" function. This function makes PC and projector network connection very easy without complicated settings like IP address and SSID.
* This function cannot be used when multiple PCs or multiple projectors are connected.
* The system of Windows2000 Professional Service Pack 4 or Windows XP and the administrator authority are required to use "One-Click-Communication" function. (Administrator authority)
* This function might not work depending on your used wireless LAN driver.
If so, setup the connection manually. (📖***10, 16*** and refer to the User Manuals for your PC and wireless equipment.)

[Wired LAN connection]

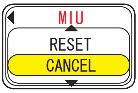
1) When projector network settings such as IP address and subnet mask are changed, need to return to the projector factory default Network settings.
   ①Press the menu button on remote control or the ▲/◄/►/▼ button on keypad. Then OSD menu will be displayed. If Easy Menu is displayed, change the menu to Advanced menu.

2.2 Network connection using “One-Click-Communication” function (Continued)

②Select the MIU menu by using ▲/▼ button.


MENU [RGB1]
:SELECT
PICTURE
IMAGE
INPUT
SETUP
SCREEN
OPTION
MIU
EASY MENU
LIVE MODE
PC-LESS PRESENTATION
SETUP
e-SHOT
INFORMATION
SERVICE

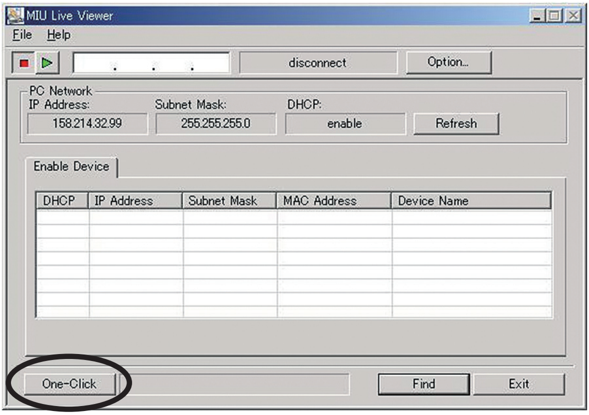
③Press the Reset key on remote control. Then Reset Menu will be displayed.


MIU
RESET
CANCEL

④Press the ▲ button to reset the Network settings.

NOTE • SSID, WEP KEY will be set to factory default settings.
• If you like to set these items, please set again from WEB (📖*19*).

2) Connect PC and projector using LAN cable to make it ready for communication.
* In case of connecting with existing network, contact your network administrator.
3) Start up “MIU Live Viewer”. Window appears in fig. 2.2.a. (Refer to section 3.1 how to use “MIU Live Viewer”.)


MIU Live Viewer
File
Help
disconnect
Option...
PC Network
Refresh
Enable Device
DHCP
IP Address
Subnet Mask
MAC Address
Device Name
One-Click
Find
Exit

IP Address: 158.214.32.99
Subnet Mask: 255.255.255.0
DHCP: enable

Fig. 2.2.a “MIU Live Viewer” initial window

2.2 Network connection using “One-Click-Communication” function (Continued)

4) Click “One-Click” button in fig. 2.2.a. Projector is found. Then capture start button ▶ is pushed and real time display is started automatically.

[Wireless LAN connection]

1) When projector network settings such as IP address and subnet mask are changed, need to return to the projector factory default settings. (📖*9*)
2) In case 802.11b/g wireless LAN device is built-in the PC, make the LAN valid and other network connections invalid. If wireless LAN device is not built in the PC, connect 802.11b/g wireless LAN device and install device driver to the PC. (Refer to the user guide for wireless LAN device details.)
3) Start up “MIU Live Viewer”, then the window appears (shown in fig. 2.2.a).
4) Click “One-Click” button as shown in fig. 2.2.a. Then projector will be found and the capture start button ▶ is activated then real time display is started automatically.

2.3 Manual network connection setting – Wired LAN -

When you need to set the original IP address and SSID other than factory default settings, need to set up network connection manually.
This section explains how to set up network connection manually.

2.3.1. Equipments connection

At first, connecting projector and PC with wired LAN connection to check PC setting and connection. Next section explains PC settings.
Connecting projector with network using LAN cable, and then set it ready to communicate with PC.
* Connecting with existing network, contact network administrator.
At last, turn on the projector. This is the end of Equipments connection.

2.3 Manual network connection setting – In case of wired LAN - (Continued)

2.3.2. Network settings

This is the explanation of network connection settings for Windows XP and Internet Explorer.

1) Log on to Windows XP as administrator authority. (*)
2) Open “Control Panel” from “Start” menu.
3) Open “Network and Internet Connections” in “Control Panel”. (Fig. 2.3.2.a)
* Administrator authority is the account, which can access to all functions.

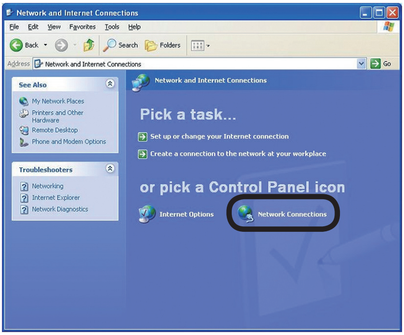

Network and Internet Connections
File Edit View Favorites Tools Help
Back
Search
Folders
Address
Network and Internet Connections
Go
See Also
My Network Places
Printers and Other Hardware
Remote Desktop
Phone and Modem Options
Troubleshooters
Networking
Internet Explorer
Network Diagnostics
Network and Internet Connections
Pick a task...
Set up or change your Internet connection
Create a connection to the network at your workplace
or pick a Control Panel icon
Internet Options
Network Connections

Fig. 2.3.2.a “Network and Internet Connections” window

4) Open “Network Connections”. (Fig. 2.3.2.b)

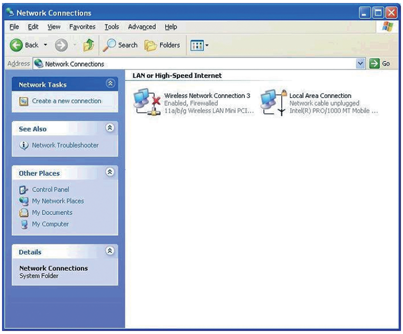
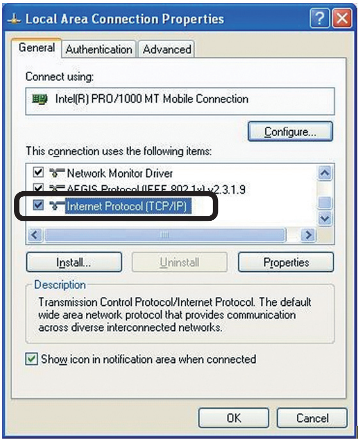

Network Connections
File Edit View Favorites Tools Advanced Help
Back
Search
Folders
Address
Network Connections
Go
Network Tasks
Create a new connection
See Also
Network Troubleshooter
Other Places
Control Panel
My Network Places
My Documents
My Computer
Details
Network Connections
System Folder
LAN or High-Speed Internet
Wireless Network Connection 3
Enabled, Firewalled
11a/b/g Wireless LAN Mini PCI...
Local Area Connection
Network cable unplugged
Intel(R) PRO/1000 MT Mobile ...

Fig. 2.3.2.b “Network Connections” window

2.3 Manual network connection setting – In case of wired LAN - (Continued)

5) When more than 2 usable network devices exist, make only one device “valid” that you want to use and the rest of devices “invalid”. (In this case, “Local Area Connection” is selected.)
6) Open “Local Area Connection Properties” window you use for network device. (Fig. 2.3.2.c)


Local Area Connection Properties
General
Authentication
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

Connect using:
Intel(R) PRO/1000 MT Mobile Connection

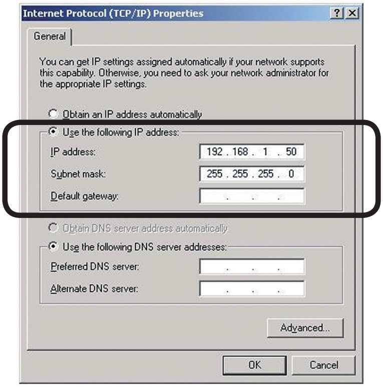
This connection uses the following items:
☑ Network Monitor Driver
☑ AEGIS Protocol (IEEE 802.1x) v2.3.1.9
☑ Internet Protocol (TCP/IP)

Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☑ Show icon in notification area when connected

Fig. 2.3.2.c “Local Area Connection Properties” window

7) Set used protocol as “TCP/IP” and open “Internet Protocol (TCP/IP) Properties” window.


Internet Protocol (TCP/IP) Properties
General
Advanced...
OK
Cancel

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:
IP address: 192 . 168 . 1 . 50
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
Preferred DNS server: . . .
Alternate DNS server: . . .

Fig. 2.3.2.d “Internet Protocol (TCP/IP) Properties” window

8) Set IP address, subnet mask and default gateway for PC.

2.3 Manual network connection setting – In case of wired LAN - (Continued)

[About IP address]

Network address portion of PC IP address should be common with projector's one but the PC total IP address should not be overlapped with other networked equipments.

For example, projector initial settings are as follows.

IP address: 192.168.1.10
Subnet mask: 255.255.255.0

Therefore, specify PC IP address as follows.

IP address: 192.168.1.xxx (xxx shows decimal number.)
Subnet mask: 255.255.255.0

Select from 1 to 254 for "xxx" not duplicating with any other equipments. In this case, projector has "192.168.1.10" IP address, specify from 1 to 254 except 10 for PC.

Projector IP address can be changed by using configuration utility. (Refer to section 2.5.)

When DHCP server exists in network, it is possible to set using IP address, which is automatically assigned to projector.

If projector and PC exist in the same network (i.e. network address is common), default gateway can be blank.

* DHCP is abbreviation for "Dynamic Host Configuration Protocol" and the function to provide necessary setting for network like IP address from server to client. Server that has DHCP function is called DHCP server.

* When projector and PC exist in different networks, default gateway setting is necessary. Contact network administrator in detail.

2.3 Manual network connection setting – In case of wired LAN - (Continued)

2.3.3 “Internet Option” setting

1) Click “Internet Options” in “Network and Internet Connections” window (Fig. 2.3.3.a) to open “Internet Properties” window. (Fig. 2.3.3.b)

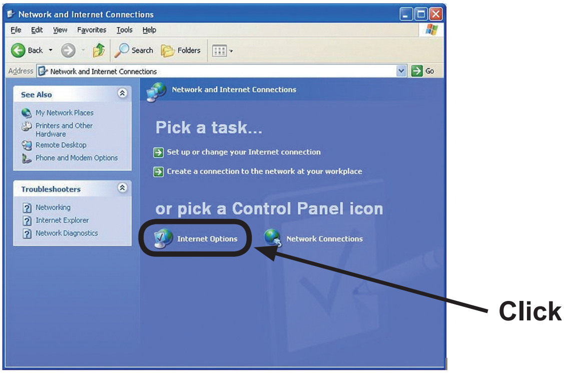
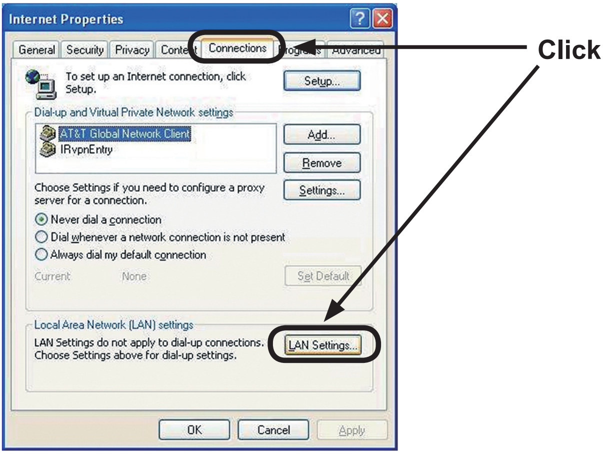

Network and Internet Connections
File
Edit
View
Favorites
Tools
Help
Back
Search
Folders
Address
Network and Internet Connections
Go
See Also
My Network Places
Printers and Other Hardware
Remote Desktop
Phone and Modem Options
Troubleshooters
Networking
Internet Explorer
Network Diagnostics
Network and Internet Connections
Pick a task...
Set up or change your Internet connection
Create a connection to the network at your workplace
or pick a Control Panel icon
Internet Options
Network Connections
Click

Fig. 2.3.3.a “Network and Internet Connections” window


Internet Properties
General
Security
Privacy
Content
Connections
Programs
Advanced
Setup...
Dial-up and Virtual Private Network settings
AT&T Global Network Client
IRvpnEntry
Add...
Remove
Settings...
Current
None
Set Default
Local Area Network (LAN) settings
LAN Settings...
OK
Cancel
Apply
Click

To set up an Internet connection, click Setup.

Choose Settings if you need to configure a proxy server for a connection.

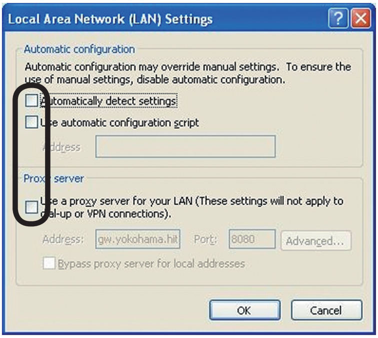
● Never dial a connection
○ Dial whenever a network connection is not present
○ Always dial my default connection

LAN Settings do not apply to dial-up connections. Choose Settings above for dial-up settings.

Fig. 2.3.3.b “Internet Properties” window

2) Click “Connections” tab and then click “LAN settings” button to open “Local Area Network (LAN) settings”. (Fig. 2.3.3.c)

2.3 Manual network connection setting – In case of wired LAN - (Continued)


Local Area Network (LAN) Settings
Automatic configuration
Proxy server
Advanced...
OK
Cancel

Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.

☐ Automatically detect settings

☐ Use automatic configuration script

Address:

☐ Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).

Address: gw.yokohama.hit Port: 8080

☐ Bypass proxy server for local addresses

Fig. 2.3.3.c “Local Area Network (LAN) Settings” window

3) Uncheck all boxes in “Local Area Network (LAN) Settings” window. (Fig. 2.3.3.c)

2.3.4 Check connection

Check PC and projector are connected properly here. If it is not connected, check cable connections and settings are properly or not.

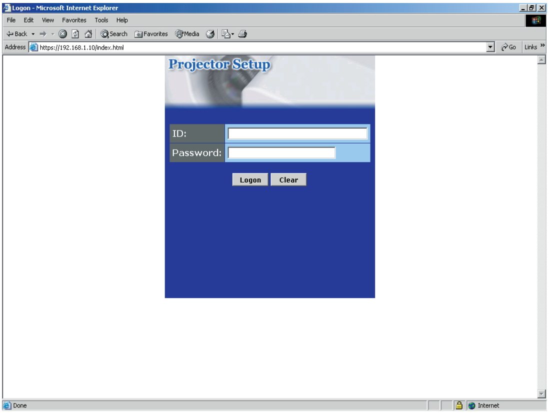
1) Start browser in PC and specify following URL, then click “Go” button.

URL: http://*(Projector IP address)* /

For example, if projector IP address is 192.168.1.10, specify

URL: http://192.168.1.10/

2) After enter your ID and password, if Fig. 2.3.4 appears, it succeeds.


Logon - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Go Links
Projector Setup
ID:
Password:
Logon
Clear
Done
Internet

Address: https://192.168.1.10/index.html

Fig. 2.3.4 “Logon Menu”

2.4 Manual network connection setting – For wireless LAN

By installing SD-Link11g card, PC and wireless LAN are able to communicate in both Ad-Hoc and Infrastructure modes.
How to set up wireless LAN connection manually.

2.4.1 Preparation for wireless LAN connection

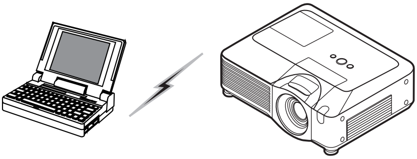


Fig. 2.4.1.a Without access point communication (Ad-Hoc)

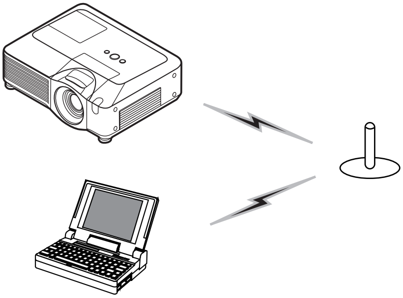


Fig. 2.4.1.b With access point communication (Infrastructure)

* Ad-Hoc is one of the wireless LAN communication methods without having access point to communicate.
* Infrastructure is one of the wireless LAN communication methods with having access point to communicate. If certain quantities of equipments are used, this mode is efficiently.
If communicating with existing network, contact your network administrator.

First, insert the SD wireless network card into SD Card slot (📖***Inserting an SD card and USB memory of the User's Manual - Operating Guide***).
Then, make PC ready for wireless communication.
In case 802.11b/g wireless LAN device is built-in the PC, make it valid and make other network connections invalid. If wireless LAN device is not built-in the PC, connect 802.11b/g wireless LAN device and install device driver. (Refer to the user guide for PC and wireless LAN device for detail.)

2.4 Manual network connection setting – For wireless LAN (Continued)

2.4.2 Wireless LAN connection set up

Using wireless LAN utility for Windows XP standard.
Wireless LAN initial settings for the projector is as follows.

Connection Control : Ad-Hoc
SSID : wireless
Channel : 1ch
Encryption rating : None
Communication speed : AUTO
IP address : 192.168.1.10

* You can change these settings as you want. Use configuration utility or menu to change. (Refer to section 2.5)

1) Open ”Network Connections”. (Fig. 2.4.2.a)

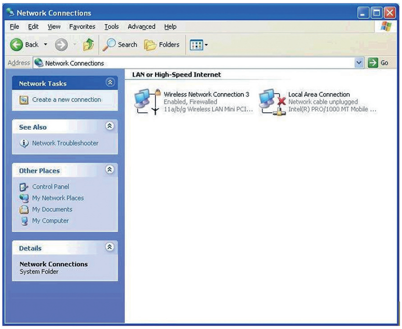
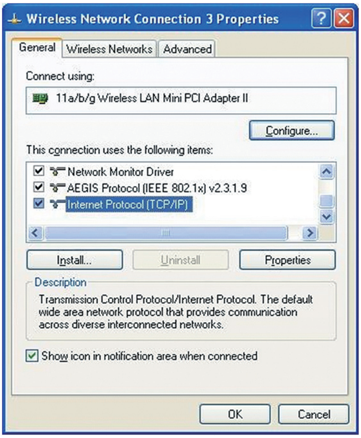

Network Connections
File Edit View Favorites Tools Advanced Help
Back
Search
Folders
Address
Network Connections
Go
LAN or High-Speed Internet
Network Tasks
Create a new connection
See Also
Network Troubleshooter
Other Places
Control Panel
My Network Places
My Documents
My Computer
Details
Network Connections
System Folder
Wireless Network Connection 3
Enabled, Firewalled
11a/b/g Wireless LAN Mini PCI...
Local Area Connection
Network cable unplugged
Intel(R) PRO/1000 MT Mobile ...

Fig. 2.4.2.a “Network Connections”

2) Make wireless network connection “Valid” and other network devices “Invalid”.
3) Open “Wireless Network Connection Properties”. (Fig. 2.4.2.b)


Wireless Network Connection 3 Properties
General
Wireless Networks
Advanced
Configure...
Install...
Uninstall
Properties
OK
Cancel

Connect using:
11a/b/g Wireless LAN Mini PCI Adapter II

This connection uses the following items:
☑ Network Monitor Driver
☑ AEGIS Protocol (IEEE 802.1x) v2.3.1.9
☑ Internet Protocol (TCP/IP)

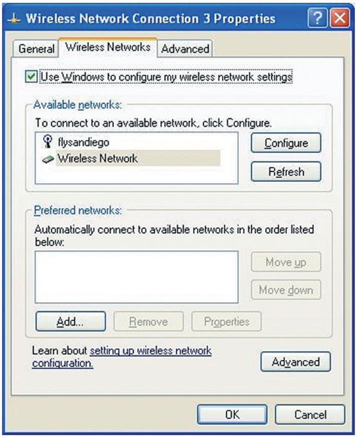
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

☑ Show icon in notification area when connected

Fig. 2.4.2.b “Wireless Network Connection Properties” window (1)

2.4 Manual network connection setting – For wireless LAN (Continued)

4) Set used protocol as “TCP/IP” and open TCP/IP property. Set IP address and other settings as same as wired LAN connection set up. (📖***12***)
5) Open “Wireless Networks” tab. (Fig. 2.4.2.c)


Wireless Network Connection 3 Properties
General
Wireless Networks
Advanced
Available networks:
flysandiego
Wireless Network
Configure
Refresh
Preferred networks:
Move up
Move down
Add...
Remove
Properties
Advanced
OK
Cancel

☑ Use Windows to configure my wireless network settings

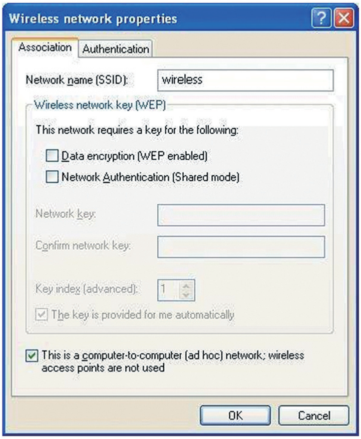
To connect to an available network, click Configure.

Automatically connect to available networks in the order listed below:

Learn about setting up wireless network configuration.

Fig. 2.4.2.c “Wireless Network Connection Properties” window (2)

6) Add check mark for “Use Windows to configure my wireless network settings” in “Wireless Network Connection Properties” window.
7) Click “Add” button in “Preferred networks” section in “Wireless Network Connection Properties” window (Fig. 2.4.2.c) to open “Wireless Network Properties” window. (Fig. 2.4.2.d)


Wireless network properties
Association
Authentication
Wireless network key (WEP)
Network key:
Confirm network key:
OK
Cancel

Network name (SSID): wireless

This network requires a key for the following:

☐ Data encryption (WEP enabled)
☐ Network Authentication (Shared mode)

Key index (advanced): 1

☑ The key is provided for me automatically

☑ This is a computer-to-computer (ad hoc) network; wireless access points are not used

Fig. 2.4.2.d “Wireless network Properties” window

2.4 Manual network connection setting – For wireless LAN (Continued)

8) Set each item as follows.
   Network name (SSID): wireless
   Data encryption: Invalid (Default setting is invalid.)

* This explanation meets the projector default setting. If access point is used or data encryption is used, if needs to change settings properly. Refer to PC or wireless LAN device user guide for detailed information.

* If using the existing network via access point, contact your network administrator.

2.5 Configuring and controlling the projector via a web browser

You can adjust or control the projector via a network from a web browser on a PC that is connected to the same network.

NOTE • Internet Explorer 5.5 or higher are required.
• If JavaScript is disabled in your web browser configuration, you must enable JavaScript in order to use the projector web pages properly. See the Help files for your web browser for details on how to enable JavaScript.
• If no operations are performed via a web browser for approx. 50 seconds the system will automatically log off. Please Re-log on to continue operations via a web browser.
• After you logon, a small, blank window will appear behind the main operation window. Please do not close this small, blank window. If this window is closed, the system will automatically log off after certain period of time even if an operation is being performed.
The small, blank window will close when the main operation window is closed.
• The small, blank window may be considered a pop-up and be blocked if you are using Windows XP Service Pack 2, or using other security software.
If Service Pack 2 blocks the window the following message will appear:
"Pop-up blocked. To see this pop-up or additional options click here..."
Please select "Temporarily Allow Pop-ups" or "Always Allow Pop-ups From This Site..." to allow the window to open.
• It is recommended that all web browser updates be installed. It is especially recommended that all users running Internet Explorer on a Microsoft Windows version prior to Windows XP Service Pack 2 install security update Q832894 (MS04-004) or the web browser interface may not be displayed correctly.
And when using an older version of Internet Explorer, during operations the browser will log out after 50 seconds.

2.5 Configuring and controlling the projector via a web browser (Continued)

When configuring or controlling the projector via a web browser, an ID and password are required. There are two types of IDs, Administrator IDs and User IDs. The following chart describes the differences between user and administrator IDs.

Item	Description	Administrator ID	User ID
Network Information	Displays the projector's current network configuration settings.	√	√
Network Settings	Displays and configures network settings.	√	N/A
Port Settings	Displays and configures communication port settings.	√	N/A
Mail Settings	Displays and configures e-mail addressing settings.	√	N/A
Alert Settings	Displays and configures failure & warning alerts.	√	N/A
Schedule Settings	Displays and configures schedule settings.	√	N/A
Date/Time Settings	Displays and configures the date and time settings.	√	N/A
Security Settings	Displays and configures passwords and other security settings.	√	N/A
Projector Control	Controls the projector.	√	√
Remote Control	Controls the projector like IR remote.	√	√
Projector Status	Displays and configures the current projector status.	√	√
Network Restart	Restarts the projector's network connection.	√	N/A

Below are the factory default settings for administrator IDs, user IDs and passwords.

Item	ID	Password
Administrator ID	Administrator	<blank>
User ID	User	<blank>

2.5 Configuring and controlling the projector via a web browser (Continued)

Refer to the following for configuring or controlling the projector via a web browser.
Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **[http://192.168.1.10/]** into the address bar of the web browser and the screen in Fig. 2.5.a will be displayed.
2) Enter your ID and password and click **[Logon]**.

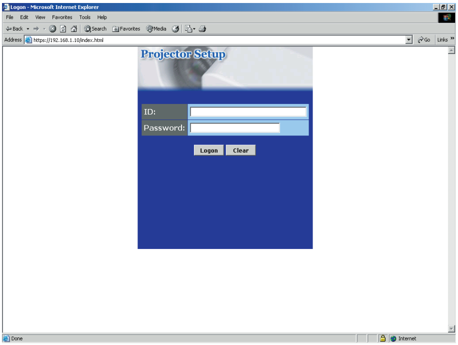
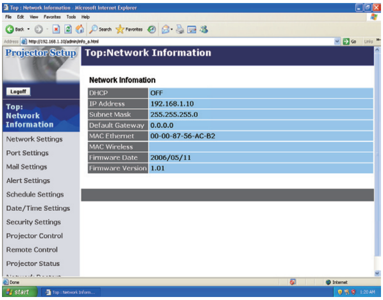

Logon - Microsoft Internet Explorer
https://192.168.1.10/index.html
Projector Setup
ID:
Password:
Logon
Clear

Fig. 2.5.a "Logon Menu"

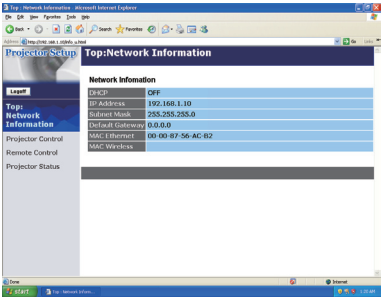
If the logon is successful either the Fig.2.5.b or Fig.2.5.c screen will be displayed.


Top : Network Information - Microsoft Internet Explorer
http://192.168.1.10/admin/info_a.html
Projector Setup
Top:Network Information
Logoff
Top:
Network
Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status

Network Infomation

DHCP	OFF
IP Address	192.168.1.10
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
MAC Ethernet	00-00-87-56-AC-B2
MAC Wireless	
Firmware Date	2006/05/11
Firmware Version	1.01

Fig. 2.5.b "Logon with administrator ID"


Top : Network Information - Microsoft Internet Explorer
http://192.168.1.10/info_u.html
Projector Setup
Top:Network Information
Logoff
Top:
Network
Information
Projector Control
Remote Control
Projector Status

Network Infomation

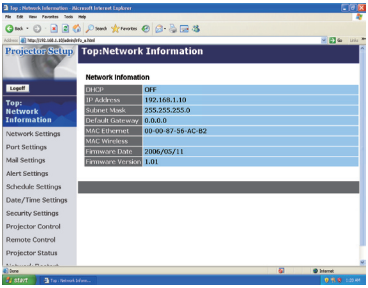
DHCP	OFF
IP Address	192.168.1.10
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
MAC Ethernet	00-00-87-56-AC-B2
MAC Wireless	

Fig. 2.5.c "Logon with user ID"

3) Click the desired operation or configuration item on the main menu located on the left-hand side of the screen (Fig. 2.5.b or Fig. 2.5.c).

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.1 Network Information


Top : Network Information - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://192.168.1.10/admin/info_a.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Done
Internet
start
Top : Network Inform...
1:20 AM

Top:Network Information

Network Infomation

DHCP	OFF
IP Address	192.168.1.10
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
MAC Ethernet	00-00-87-56-AC-B2
MAC Wireless	
Firmware Date	2006/05/11
Firmware Version	1.01

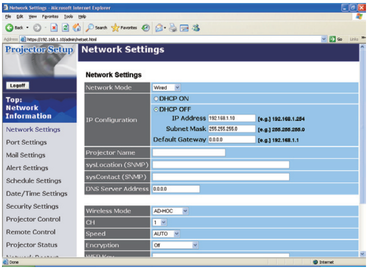
All screen images displayed in this manual are screens of a logon using an administrator ID. Any administrator only functions will not be displayed when using a user ID. Refer to the descriptions in each table.

Displays the projector’s current network configuration settings.

Item	Description
DHCP	Displays the DHCP configuration settings.
IP Address	Displays the current IP address.
Subnet Mask	Displays the Subnet Mask.
Default Gateway	Displays the Default Gateway.
MAC Ethernet	Displays the Ethernet MAC address.
MAC Wireless	Displays the Wireless LAN MAC address.
Firmware Date	Displays the network firmware time stamp. This information is only displayed when logged on using an administrator ID.
Firmware Version	Displays the network firmware version number. This information is only displayed when logged on using an administrator ID.
Wireless CH	Displays wireless LAN default channel. (Not Supported)
SD Card Status	Displays SD card slot status. (Not Supported)
Wireless Speed	Displays wireless LAN connection speed. (Not Supported) **NOTE** • When you select wireless mode "AD-HOC", speed value is not true until the projector connect wireless LAN.
USB Status	Displays USB-A port status. (Not Supported)
USB Power	Displays USB-A port supplying power or not. (Not Supported)

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.2 Network Settings


Network Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address https://192.168.1.10/admin/netset.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Done
Internet

Network Settings

Network Settings

Network Mode: Wired

IP Configuration:
○ DHCP ON
● DHCP OFF
IP Address 192.168.1.10 [e.g.] 192.168.1.254
Subnet Mask 255.255.255.0 [e.g.] 255.255.255.0
Default Gateway 0.0.0.0 [e.g.] 192.168.1.1

Projector Name:
sysLocation (SNMP):
sysContact (SNMP):
DNS Server Address: 0.0.0.0

Wireless Mode: AD-HOC
CH: 1
Speed: AUTO
Encryption: Off

Displays and configures network settings.

Item			Description
NETWORK MODE			Select Network mode "wired" or "wireless".
IP Configuration			Configures network settings.
	DHCP ON		Enables DHCP.
	DHCP OFF		Disables DHCP.
		IP Address	Configures the IP address when DHCP is disabled.
		Subnet Mask	Configures the Subnet Mask when DHCP is disabled.
		Default Gateway	Configures the Default Gateway when DHCP is disabled.
Projector Name			Configures the Projector name.
SysLocation (SNMP)			Configures the location to be referred to when using SNMP.
SysContact (SNMP)			Configures the contact information to be referred to when using SNMP.
DNS Server Address			Configures the DNS Server address.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.2 Network Settings (Continued)

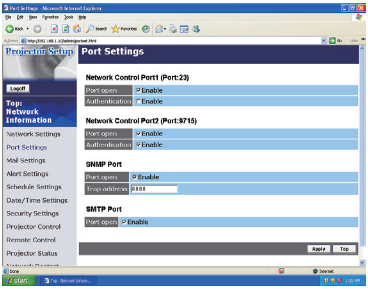
<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Wireless Mode</td><td></td></tr>
<tr><td>Mode</td><td>Select "AD-HOC" or "Infrastructure".</td></tr>
<tr><td>CH
(Communication channel)</td><td>Select using channel between "1" and "11".
NOTE • Depending on the country where you are the channels may vary. In addition, depending on the country or region where you are may be required to use a wireless LAN card that confirm to the standards in the respective country or region.</td></tr>
<tr><td>Speed
(Communication speed)</td><td>Select communication speed.</td></tr>
<tr><td>Encryption</td><td>Select data encryption method.</td></tr>
<tr><td>WEP Key</td><td>Input WEP key, which has same length defined by WEP. When "64bit" or "128bit" is selected, input 10 characters or 26 characters respectively. Only numbers from "0" to "9" and alphabets from "a" to "f" can be used.</td></tr>
<tr><td>WPA Passphrase</td><td>Input WPA Passphrase. Available number of input characters is 8 to 63. Only alphabets, numbers and following symbols can be used.
!"#$%&'()*+,-./[¥]^_`{|}~</td></tr>
<tr><td>SSID</td><td>Set SSID. Maximum number of input characters is 32. Only alphabets, numbers and following symbols can be used.
!"#$%&'()*+,-./[¥]^_`{|}~</td></tr>
</table>

Click the **[Apply]** button to save the settings.

NOTE • The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.
• If you connect the projector to an existing network, consult a network administrator before setting server addresses.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.3 Port Settings


Port Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Address http://192.168.1.10/admin/portset.html
Go
Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Apply
Top
Done
Internet
start
Top : Network Inform...
1:20 AM

Port Settings

Network Control Port1 (Port:23)

Port open ☑ Enable

Authentication ☐ Enable

Network Control Port2 (Port:9715)

Port open ☑ Enable

Authentication ☑ Enable

SNMP Port

Port open ☑ Enable

Trap address 0.0.0.0

SMTP Port

Port open ☑ Enable

Displays and configures communication port settings.

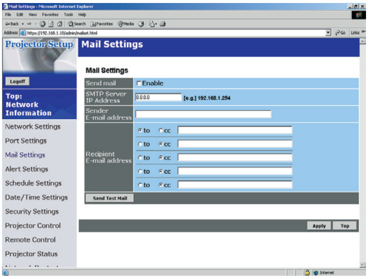
Item	Description
Network Control Port1 (Port:23)	Configures command control port 1 (Port:23).
Port open	Click the **[Enable]** check box to use port 23.
Authentication	Click the **[Enable]** check box when authentication is required for this port.
Network Control Port2 (Port:9715)	Configures command control port 2 (Port:9715).
Port open	Click the **[Enable]** check box to use port 9715.
Authentication	Click the **[Enable]** check box when authentication is required for this port.
SNMP Port	Configures the SNMP port.
Port open	Click the **[Enable]** check box to use SNMP.
Trap address	Configures the destination of the SNMP Trap in IP format.
SMTP Port	Configures the SMTP port.
Port open	Click the **[Enable]** check box to use the e-mail function.

Click the **[Apply]** button to save the settings.

NOTE • The new configuration settings are activated after restarting the network connection. The network connection must be restarted when the configuration settings are changed. The network connection can be restarted using **[Network Restart]** on the main menu.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.4 Mail Settings


Mail Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address https://192.168.1.10/admin/mailset.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Send Test Mail
Apply
Top
Internet

Mail Settings

Mail Settings

Send mail ☐ Enable

SMTP Server IP Address 0.0.0.0 [e.g.] 192.168.1.254

Sender E-mail address

Recipient E-mail address
● to ○ cc
○ to ● cc
○ to ● cc
○ to ● cc
○ to ● cc

Displays and configures e-mail addressing settings.

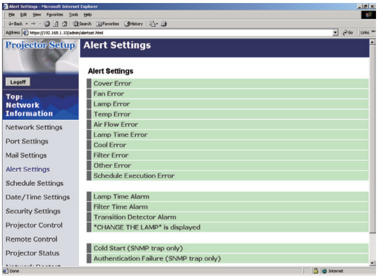
Item	Description
Send Mail	Click the **[Enable]** check box to use the e-mail function. Configure the conditions for sending email under **[Alert Settings]**.
SMTP Server IP Address	Configures the address of the mail server in IP format.
Sender E-mail address	Configures the sender e-mail address. The length of the sender e-mail address can be up to 255 alphanumeric characters.
Recipient E-mail address	Configures the e-mail address of up to five recipients. You can also specify **[TO]** or **[CC]** for each address. The length of the recipient e-mail address can be up to 255 alphanumeric characters.

Click the **[Apply]** button to save the settings.

NOTE • You can confirm whether the mail settings work correctly using the [Send Test Mail] button.
• If you connect the projector to an existing network, consult a network administrator before setting server addresses.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.5 Alert Settings


Alert Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://192.168.1.10/admin/alertset.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Alert Settings
Alert Settings
Cover Error
Fan Error
Lamp Error
Temp Error
Air Flow Error
Lamp Time Error
Cool Error
Filter Error
Other Error
Schedule Execution Error
Lamp Time Alarm
Filter Time Alarm
Transition Detector Alarm
"CHANGE THE LAMP" is displayed
Cold Start (SNMP trap only)
Authentication Failure (SNMP trap only)
Done
Internet

Displays and configures failure & warning alerts.

Item	Description
Cover Error	Configures Cover Error alert settings.
SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Fan Error	Configures Fan Error alert settings.
SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
Mail Text	Configures the text of the e- mail to be sent. The length of the text can be up to 1024 alphanumeric characters.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.5 Alert Settings (Continued)

Item		Description
Lamp Error		Configures Lamp Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Temp Error		Configures Temp Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Air Flow Error		Configures Air Flow Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.5 Alert Settings (Continued)

Item		Description
Lamp Time Error		Configures Lamp Time Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Cool Error		Configures Cool Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Filter Error		Configures Filter Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.5 Alert Settings (Continued)

Item		Description
Other Error		Configures Other Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Schedule Execution Error		Configures Schedule Execution Error alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable**] check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Lamp Time Alarm		Configures Lamp Time Alarm alert settings.
	Alarm Time	Configures the lamp time to alert.
	SNMP Trap	Click the **[Enable**] check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.

2.5 Configuring and controlling the projector via a web browser (Continued)

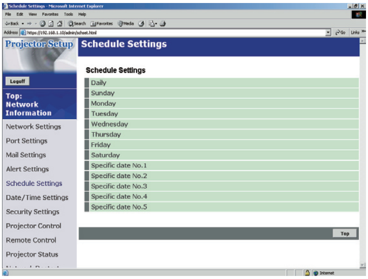
2.5.5 Alert Settings (Continued)

Item		Description
Filter Time Alarm		Configures Filter Time Alarm alert settings.
	Alarm Time	Configures the filter time to alert.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Transition Detector Alarm		Configures Transition Detector Alarm alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
“CHANGE THE LAMP” is displayed		Configures alert settings for when “CHANGE THE LAMP” is displayed.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
	Send Mail	Click the **[Enable]** check box to enable e-mail alerts for this item.
	Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters.
	Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters.
Cold Start		Configures Cold Start alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.
Authentication Failure		Configures Authentication Failure alert settings.
	SNMP Trap	Click the **[Enable]** check box to enable SNMP Trap alerts for this item.

Click the **[Apply]** button to save the settings.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.6 Schedule Settings


Schedule Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address https://192.168.1.10/admin/schset.html
Go Links
Projector Setup
Schedule Settings
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Schedule Settings
Daily
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Specific date No.1
Specific date No.2
Specific date No.3
Specific date No.4
Specific date No.5
Top
Internet

Displays and configures schedule settings.

Item	Description
Daily	Configures the daily schedule.
Schedule	Click the **[Enable]** check box to enable daily scheduling.
Schedule List	Displays the current daily schedule.
Sunday	Configures the Sunday schedule.
Schedule	Click the **[Enable]** check box to enable Sunday scheduling.
Schedule List	Displays the current Sunday schedule.
Monday	Configures the Monday schedule.
Schedule	Click the **[Enable]** check box to enable Monday scheduling.
Schedule List	Displays the current Monday schedule.
Tuesday	Configures the Tuesday schedule.
Schedule	Click the **[Enable]** check box to enable Tuesday scheduling.
Schedule List	Displays the current Tuesday schedule.
Wednesday	Configures the Wednesday schedule.
Schedule	Click the **[Enable]** check box to enable Wednesday scheduling.
Schedule List	Displays the current Wednesday schedule.
Thursday	Configures the Thursday schedule.
Schedule	Click the **[Enable]** check box to enable Thursday scheduling.
Schedule List	Displays the current Thursday schedule.
Friday	Configures the Friday schedule.
Schedule	Click the **[Enable]** check box to enable Friday scheduling.
Schedule List	Displays the current Friday schedule.
Saturday	Configures the Saturday schedule.
Schedule	Click the **[Enable]** check box to enable Saturday scheduling.
Schedule List	Displays the current Saturday schedule.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.6 Schedule Setting (Continued)

Item		Description
Specific date No1		Configures the specific date (No.1) schedule.
	Schedule	Click the **[Enable]** check box to enable specific date (No.1) scheduling.
	Month/Day	Configures the Month and date.
	Schedule List	Displays the current specific date (No.1) schedule.
Specific date No.2		Configures the specific date (No.2) schedule.
	Schedule	Click the **[Enable]** check box to enable specific date (No.2) scheduling.
	Month/Day	Configures the Month and date.
	Schedule List	Displays the current specific date (No.2) schedule.
Specific date No.3		Configures the specific date (No.3) schedule.
	Schedule	Click the **[Enable]** check box to enable specific date (No.3) scheduling.
	Month/Day	Configures the Month and date.
	Schedule List	Displays the current specific date (No.3) schedule.
Specific date No.4		Configures the specific date (No.4) schedule.
	Schedule	Click the **[Enable]** check box to enable specific date (No.4) scheduling.
	Month/Day	Configures the Month and date.
	Schedule List	Displays the current specific date (No.4) schedule.
Specific date No.5		Configures the specific date (No.5) schedule.
	Schedule	Click the **[Enable]** check box to enable specific date (No.5) scheduling.
	Month/Day	Set the Month and date.
	Schedule List	Displays the current specific date (No.5) schedule.

Click the **[Apply]** button to save the settings.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.6 Schedule Setting (Continued)

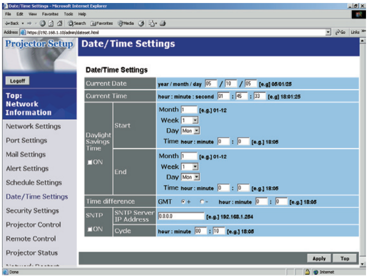
To add additional functions and events click the **[Add]** button and set the following items.

Item		Description
Time		Configures the time to execute commands.
Command		Configures the commands to be executed.
	Power Parameter	Configures the parameters for power control.
	Input Source Parameter	Configures the parameters for input switching.
	Display Image Parameter	Configures the parameters for display of transfer image data.

Click the **[Register]** button to add new commands to the Schedule List.

Click the **[Delete]** button to delete commands from the Schedule List.

2.5.7 Date/Time Settings


Date/Time Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address https://192.168.1.10/admin/dateset.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Apply
Top
Done
Internet

Date/Time Settings

Date/Time Settings

Current Date: year / month / day 05 / 10 / 05 [e.g] 05/01/25

Current Time: hour : minute : second 01 : 45 : 33 [e.g] 18:01:25

Daylight Savings Time ☐ON

Start: Month 1 [e.g.] 01-12; Week 1; Day Mon; Time hour : minute 0 : 0 [e.g.] 18:05

End: Month 1 [e.g.] 01-12; Week 1; Day Mon; Time hour : minute 0 : 0 [e.g.] 18:05

Time difference: GMT ● + ○ - hour : minute 0 : 0 [e.g.] 18:05

SNTP ☐ON

SNTP Server IP Address: 0.0.0.0 [e.g.] 192.168.1.254

Cycle: hour : minute 00 : 10 [e.g.] 18:05

Displays and configures the date and time settings.

Item	Description
Current Date	Configures the current date in Year/Month/Day format.
Current Time	Configures the current time in Hour:Minute:Second format.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.7 Date/Time Settings (Continued)

Item			Description
Daylight Savings Time			Click the **[ON]** check box to enable daylight savings time and set the following items.
	Start		Configures the date and time daylight savings time begins.
		Month	Configures the month daylight savings time begins (1~12).
		Week	Configures the week of the month daylight savings time begins (First, 2, 3, 4, Last).
		Day	Configures the day of the week daylight savings time begins (Sun, Mon, Tue, Wed, Thu, Fri, Sat).
		Hour	Configures the hour daylight savings time begins (0 ~ 23).
		Minute	Configures the minute daylight savings time begins (0 ~ 59).
	End		Configures the date and time daylight savings time ends.
		Month	Configures the month daylight savings time ends (1 ~ 12).
		Week	Configures the week of the month daylight savings time ends (First, 2, 3, 4, Last).
		Day	Configures the day of the week daylight savings time ends (Sun, Mon, Tue, Wed, Thu, Fri, Sat).
		Hour	Configures the hour daylight savings time ends (0 ~ 23).
		Minute	Configures the minute daylight savings time ends (0 ~ 59).
Time difference			Configures the time difference (hours:minutes). Set the same time difference as the one set on your PC. If unsure, consult your network administrator.
SNTP			Click the **[ON]** check box to retrieve Date and Time information from the SNTP server and set the following items.
	SNTP Server IP Address		Configures the SNTP server address in IP format.
	Cycle		Configures the interval at which to retrieve Date and Time information from the SNTP server. (hours:minutes).

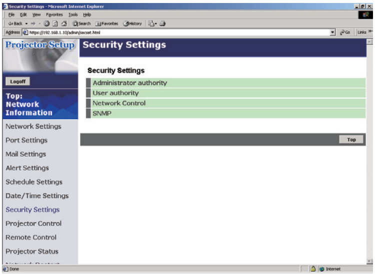
Click the **[Apply]** button to save the settings.

NOTE • The new configuration settings are activated after restarting the network connection. The network connection must be restarted when the configuration settings are changed, The network connection can be restarted using **[Network Restart]** on the main menu.

- If you connect the projector to an existing network, consult a network administrator before setting server addresses.
- To enable the SNTP function, the time difference must be set.
- The projector will retrieve DATE and TIME information from the timeserver and override time settings when SNTP is enabled.
- The Internal Clock's time may not remain accurate. Using SNTP is recommended to maintain accurate time.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.8 Security Settings


Security Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://192.168.1.10/admin/secset.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Security Settings
Security Settings
Administrator authority
User authority
Network Control
SNMP
Top
Done
Internet

Displays and configures passwords and other security settings.

Item	Description
Administrator authority	Configures the Administrator ID and Password.
Administrator ID	Configures the Administrator ID. The length of the text can be up to 32 alphanumeric characters.
Administrator Password	Configures the Administrator Password. The length of the text can be up to 255 alphanumeric characters.
Re-enter Administrator Password	Re-enter the above password for verification.
User authority	Configures the User ID and Password.
User ID	Configures the User ID. The length of the text can be up to 32 alphanumeric characters.
User Password	Configures the User Password. The length of the text can be up to 255 alphanumeric characters.
Re-enter User Password	Used to re-enter the above password for verification.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.8 Security Settings (Continued)

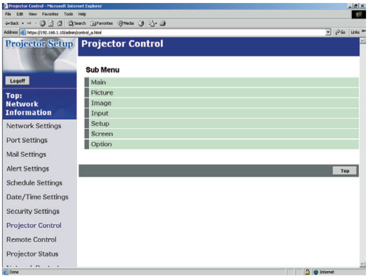
Item		Description
Network Control		Configures the Authentication Password for the command control.
	Authentication Password	Configures the Authentication Password. The length of the text can be up to 16 alphanumeric characters.
	Re-enter Authentication Password	Used to re-enter the above password for verification.
SNMP		Configures the community name if SNMP is used.
	Community Name	Configures the community name. The length of the text can be up to 64 alphanumeric characters.
FTP		Configures the FTP user and password.
	USER	Configures the user name. The length of the text can be up to 32 alphanumeric characters.
	Password	Configures the password. The length of the text can be up to 32 alphanumeric characters.
	Re-enter Password	Use to re-enter the above password for verification.

Click the **[Apply]** button to save the settings.

NOTE • The new configuration settings are activated after restarting the network connection. The network connection must be restarted when the configuration settings are changed. The network connection can be restarted using **[Network Restart]** on the main menu.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.9 Projector Control


Projector Control - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address https://192.168.1.10/admin/control_a.html
Go Links
Projector Setup
Projector Control
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Sub Menu
Main
Picture
Image
Input
Setup
Screen
Option
Top
Done
Internet

The items shown in the table below can be performed using the **[Projector Control]** menu.
Select an item using the up and down arrow keys on the PC.
Most of the items have a submenu.
Refer to the table below for details.

Controls the projector.

Item	Description
Main	
Power	Turns the power On/Off.
Input Source	Selects the input source.
Picture Mode	Selects the Picture Mode setting.
Blank On/Off	Turns Blank On/Off.
Mute	Turns Mute On/Off.
Freeze	Selects the Freeze setting.
Magnify	Controls the Magnify setting.
Picture	
Brightness	Adjusts the Brightness setting.
Contrast	Adjusts the Contrast setting.
Gamma	Selects the Gamma setting.
Color Temp	Selects the Color Temp setting.
Color	Adjusts the Color setting.
Tint	Adjusts the Tint setting.
Sharpness	Adjusts the Sharpness setting.
Active Iris	Selects the Active Iris setting.
MyMemory Recall	Recalls the MyMemory data.
MyMemory Save	Saves the MyMemory data.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.9 Projector Control (Continued)

Item		Description
Image		
	Aspect	Selects the Aspect setting.
	Over Scan	Selects the Over Scan setting.
	V Position	Adjusts the V Position.
	H Position	Adjusts the H Position.
	H Phase	Adjusts the H Phase.
	H Size	Adjusts the H Size.
	Auto Adjust	Performs Auto Adjustment.
Input		
	Progressive	Selects the progressive setting.
	Video NR	Selects the Video NR setting.
	3D-YCS	Selects the 3D-YCS setting.
	Color Space	Selects the Color Space.
	Component	Selects the Component terminal setting.
	C-Video Format	Selects the Video Format setting.
	S-Video Format	Selects the S-Video Format setting.
	M1-D	Selects the M1-D setting.
	Frame Lock	Enables/Disables Frame Lock.
	RGB in-1	Selects the RGB1 input signal type.
	RGB in-2	Selects the RGB2 input signal type.
Setup		
	Auto Keystone Execute	Performs the Automatic keystone distortion correction.
	Keystone V	Adjusts the Vertical Keystone setting.
	Keystone H	Adjusts the Horizontal Keystone setting.
	Whisper	Selects the Fan speed. (Normal or Whisper)
	Mirror	Selects the Mirror status.

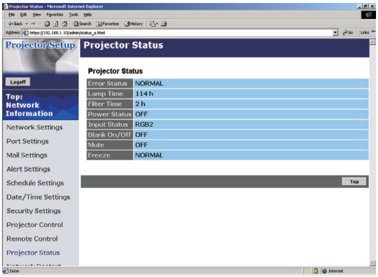
2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.9 Projector Control (Continued)

Item		Description
Audio		
	Volume	Adjusts the Volume setting.
	Treble	Adjust the Treble setting.
	Bass	Adjusts the Bass setting.
	SRS WOW	Selects the SRS WOW setting.
	Speaker	Turns Speaker On/Off.
	Audio-RGB1	Assigns the Audio-RGB1 input terminal.
	Audio-RGB2	Assigns the Audio-RGB2 input terminal.
	Audio-M1-D	Assigns the Audio-M1-D input terminal.
	Audio-Video	Assigns the Audio-Video input terminal.
	Audio-S-Video	Assigns the Audio-S-Video input terminal.
	Audio-Component	Assigns the Audio-Component input terminal.
	Audio-MIU	Assigns the Audio-MIU input terminal.
Screen		
	Language	Selects the Language for the OSD.
	Menu Position V	Adjusts the vertical Menu Position.
	Menu Position H	Adjusts the horizontal Menu Position.
	Blank	Selects the Blank mode.
	Startup	Selects the Startup screen mode.
	MyScreen Lock	Turns MyScreen Lock On/Off.
	Message	Turns the Message function On/Off.
Option		
	Auto Search	Turns the Automatic signal search function On/Off.
	Auto Keystone	Turns the Automatic keystone distortion correction function On/Off.
	Auto on	Turns the Auto on function On/Off.
	Auto off	Configures the timer to shut off the projector when no signal is detected.
	My Button-1	Assigns the functions for the MY BUTTON1 buttons on the included remote control.
	My Button-2	Assigns the functions for the MY BUTTON2 buttons on the included remote control.
	Auto Adjust	Enables/Disables Auto Adjustment.
	Remote Receiv. Front	Enable/Disable Remote Receiv. Front.
	Remote Receiv. Rear	Enable/Disable Remote Receiv. Rear.
	Remote Receiv. Top	Enable/Disable Remote Receiv. Top.
	Remote Freq. Normal	Enable/Disable
	Remote Freq. High	Enable/Disable

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.10 Projector Status


Projector Status - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address https://192.168.1.10/admin/status_a.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Top
Done
Internet

Projector Status

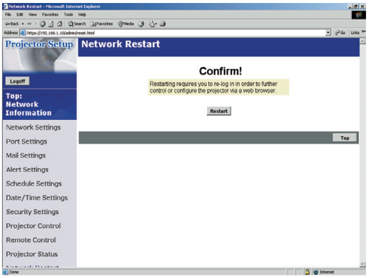
Projector Status

Error Status	NORMAL
Lamp Time	114 h
Filter Time	2 h
Power Status	OFF
Input Status	RGB2
Blank On/Off	OFF
Mute	OFF
Freeze	NORMAL

Displays and configures the current projector status.

Item	Description
Error Status	Displays the current error status
Lamp Time	Displays the usage time for the current lamp.
Filter Time	Displays the usage time for the current filter.
Power Status	Displays the current power status.
Input Status	Displays the current input signal source.
Blank On/Off	Displays the current Blank On/Off status.
Mute	Displays the current Mute On/Off status.
Freeze	Displays the current Freeze On/Off status.

2.5.11 Network Restart


Network Restart - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address https://192.168.1.10/admin/reset.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Restart
Top
Done
Internet

Network Restart

Confirm!

Restarting requires you to re-log in in order to further control or configure the projector via a web browser.

Restarts the projector’s network connection.

Item	Description
Restart	Restarts the projector’s network connection in order to activate new configuration settings.

NOTE • Restarting requires you to re-log on in order to further control or configure the projector via a web browser.

2.5.12 Logoff

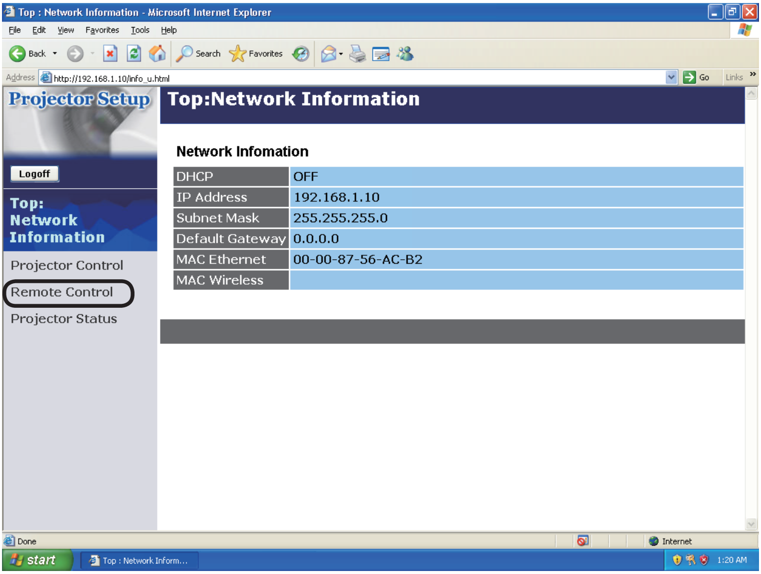
When logoff is clicked, the logon screen is displayed (📖***21*** : Fig. 2.5.a).

2.6 Utilize Web Remote Control

You can use your Web browser to remote control the projector once the projector is properly configured and connected to your PC via the wireless LAN card or via wired LAN.

NOTE • Do not attempt to control the projector with the projector's remote control and via your Web browser at the same time. Attempt to do so may causes a projector operational error.

Open browser when it is possible to communicate with projector. Corresponding browser is Internet Explorer 5.5 or later.
Specify http://(projector IP address)/ to start.
For example, http://192.168.1.10/
(Input this URL when IP address is not changed.)
After start up, enter your ID and password, and click [Logon]. Following window appears as shown in fig. 2.6.a.


Top : Network Information - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Address
http://192.168.1.10/info_u.html
Go
Links
Projector Setup
Logoff
Top: Network Information
Projector Control
Remote Control
Projector Status
Done
Internet
start
Top : Network Inform...
1:20 AM

Top:Network Information

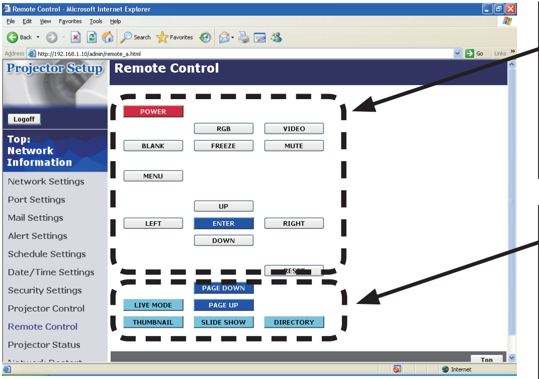
Network Infomation

DHCP	OFF
IP Address	192.168.1.10
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
MAC Ethernet	00-00-87-56-AC-B2
MAC Wireless	

Fig. 2.6.a Utility selection window for Web Remote Control

2.6 Utilize Web Remote Control (Continued)

Click “Remote Control” in this window to display Web Remote Control as shown in fig.2.6.b.


Remote Control - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Address http://192.168.1.10/admin/remote_a.html
Go
Links
Projector Setup
Remote Control
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
POWER
RGB
VIDEO
BLANK
FREEZE
MUTE
MENU
UP
LEFT
ENTER
RIGHT
DOWN
RESET
PAGE DOWN
LIVE MODE
PAGE UP
THUMBNAIL
SLIDE SHOW
DIRECTORY
Top
Internet

The same operation as the bundled remote control will done. UP/LEFT/RIGHT/DOWN corresponds to ▲/◄/►/▼ respectively.

Each mode will be activated by clicking these buttons.

- LIVE MODE
- THUMBNAIL
- SLIDE SHOW
- DIRECTORY

Fig. 2.6.b Web Remote Control

NOTE • Web Remote Control does not support repeat function when it is kept clicking.

- Since automatic repeat function is not available, click the button necessary times to reach your demand.
- If you click the button continuously, some command will not be transferred. Wait for a while, and Click again.
- When the power button is pushed, a message comes up to confirm the operation. If you wish to turn it off, push OK, otherwise push CANCEL.
- PAGE DOWN and PAGE UP buttons on web remote control can not be used as mouse emulation function of the projector.

3. How to use Projector software – Basics -

3.1 How to use “MIU Live Viewer”

This section explains how to use the “MIU Live Viewer”.

3.1.1. Install “MIU Live Viewer”

In order to use the projector with a PC for Live Mode, you will first need to install the accompanying software on all the PCs you will be using.

Minimum PC Hardware and Software Requirements

- OS: Windows 2000 Professional Service Pack4, Windows XP Home Edition/Professional
- Graphic Interface: DirectX 6.1a or higher; Video RAM 4MB or higher (8MB recommended)
- CPU: Pentium III (600MHz or higher recommended)
- Display: VGA 640x480 or higher (XGA 1024x768 recommended) 65,536 simultaneous colors or higher

NOTE • Set your PC’s resolution to XGA or less.
• In some cases, Screen will not be displayed correctly like no displays larger than XGA portion.
• Images might not been transmitted, caused by OS version or the driver software for Network Adaptor.
It is highly recommended that OS and the driver should be updated to the latest.

- Memory: 64MB or higher (128MB or higher if using Windows XP)
- Available Hard Disk Space: 10MB or higher
- Web browser: Internet Explorer® (5.5 or higher)
- CD-ROM drive

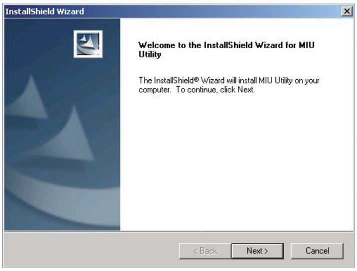
- PC with PC card slot (PCMCIA Type-II) interface and IEEE802.11g wireless LAN PC card or PC with USB Interface and IEEE802.11g wireless LAN USB adaptor.

NOTE • Not required for PCs with built-in 802.11g wireless LAN.
• Depending on the type of wireless LAN card and PC you are using, the projector may not be able to communicate properly with your PC, even if the PC you are using is equipped with built-in wireless LAN functionality.
Should communication problems occur, please procure a Wi-Fi certified wireless LAN card.

3.1 How to use “MIU Live Viewer” (Continued)

3.1.2. Software Installation Procedure

1) Turn on the PC.
2) Shut down all applications.
3) Insert the accompanying CD-ROM into the PC's CD-ROM drive.
4) After a moment, the Welcome to MIU Utilities Setup dialog will appear as shown on the right. Press Next.



Welcome to the InstallShield Wizard for MIU Utility

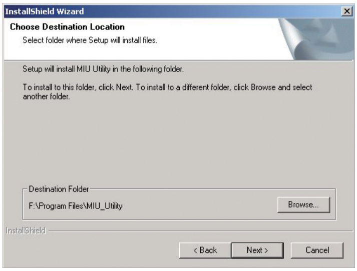
The InstallShield® Wizard will install MIU Utility on your computer. To continue, click Next.

NOTE If the Welcome to MIU Utilities Setup dialog doesn't appear, proceed as follows:
(1) Click on the Start button on the toolbar and select Run.
(2) Enter E:\software\setup.exe and then press OK.

↑ If your CD-ROM drive is not drive E on your PC, you will need to replace E with the correct drive letter assigned to your CD-ROM drive.

If software has been already installed, Uninstallation will be done. Click the cancel button, then uninstallation will be canceled. If you uninstalled the software by mis-operation, please re-install the software from first procedure.

5) The License Agreement dialog appears. If you accept it, press the “Yes”.
6) The Choose Destination Location dialog appears. Press Next.



Choose Destination Location

Select folder where Setup will install files.

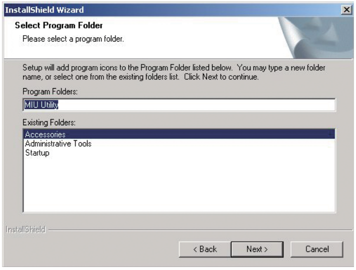
Setup will install MIU Utility in the following folder.

To install to this folder, click Next. To install to a different folder, click Browse and select another folder.

Destination Folder: F:\Program Files\MIU_Utility

NOTE • The C:\Program Files\MIU_Utility folder will be created and the program will be installed into that folder.
• If you wish to install to a different folder, click Browse and select another folder.

7) Confirm the program folder name.
If MIU_Utility is okay, press Next to continue.
If not, enter the desired folder name and then press Next.



Select Program Folder

Please select a program folder.

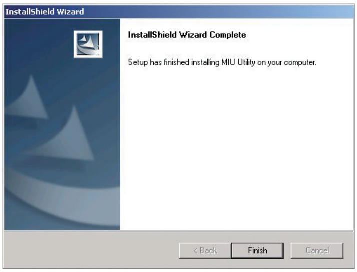
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing folders list. Click Next to continue.

Program Folders: MIU Utility

Existing Folders:
- Accessories
- Administrative Tools
- Startup

3.1 How to use “MIU Live Viewer” (Continued)

8) The Hardware Installation dialog appears. Press Continue Anyway.
9) After a moment, installation will complete and the Setup Complete dialog will appear as shown on the right. Click Finish.
   This completes the software installation. Then your PC automatically restarts.
   (1) To confirm that the software as been properly installed, press the Start button on the toolbar, select All Programs and then select the MIU Utility folder.
   (2) MIU Live Viewer will appear in that folder if the installation was successful.

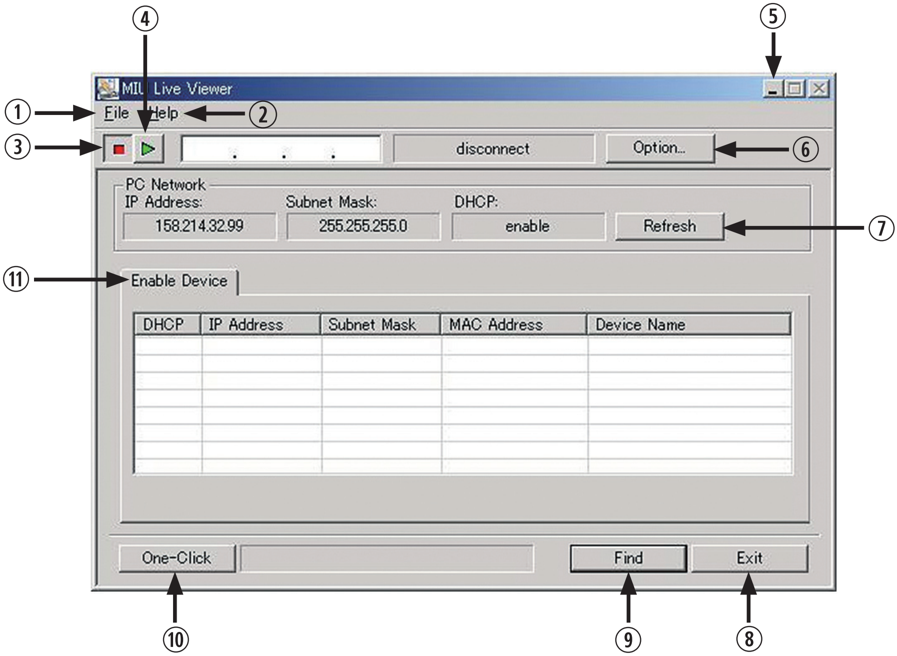

InstallShield Wizard
< Back
Finish
Cancel

InstallShield Wizard Complete

Setup has finished installing MIU Utility on your computer.

3.1.3 Explanation of “MIU Live Viewer”

Double click “LiveViewer.exe” to start up. Fig. 3.1.3.a appears on your screen.


④
⑤
MIU Live Viewer
①
File
Help
②
③
disconnect
Option...
⑥
PC Network
IP Address:
Subnet Mask:
DHCP:
Refresh
⑦
⑪
Enable Device
DHCP
IP Address
Subnet Mask
MAC Address
Device Name
One-Click
Find
Exit
⑩
⑨
⑧

IP Address: 158.214.32.99 Subnet Mask: 255.255.255.0 DHCP: enable

Fig. 3.1.3.a “MIU Live Viewer” Window

3.1 How to use “MIU MIU Live Viewer” (Continued)

[“MIU Live Viewer” window: Fig. 3.1.3.a]

1) “File” button
   Display file menu.
2) “Help” button
   Display “MIU Live Viewer” information.
3) Stop button
   Disconnect projector connection.
4) Capture start button
   Start real time display.

NOTE • Pictures are not displayed correctly when the start/stop buttons are clicked repeatedly.

5) Minimize button
   Close “MIU Live Viewer” window and display “MIU Live Viewer” as icon on the task tray.
6) “Option” button
   Display Option window.
7) “Refresh” button
   Refresh the current PC network setting.
8) “Exit” button
   Terminate “MIU Live Viewer”.
9) “Find” button
   Search connectable projectors.
10) “One-Click” button
    Connect projector and PC without network setting of the PC.
11) “Enable Device”
    Display network-connectable projector list.

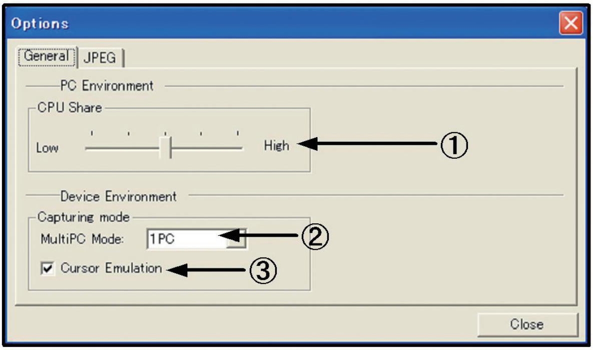
NOTE • When Multi PC mode is not selected, if there is no other PC connected, the last image will be held on screen until getting out of Live Mode or turning the projector off.

Thanks to the feature, the PC can be used to prepare the next presentation file or others without showing it on screen if the communication to the projector is turned off.

3.1 How to use “MIU Live Viewer” (Continued)

[“Options” window]

[“General” tab, Fig. 3.1.3.b]


Options
General
JPEG
PC Environment
CPU Share
Low
High
①
Device Environment
Capturing mode
MultiPC Mode:
②
☑ Cursor Emulation
③
Close

MultiPC Mode: 1PC

Fig.3.1.3.b “Options”, “General” tab

1) CPU Share
Set up any capturing performance on the PC screen by using control bar
Low (At the far left): Set this position when many CPU resources are required by applications other than “MIU Live Viewer”. This setting is not good for displaying frequently changed patterns due to decrease in screen refresh rate by “MIU Live Viewer” performance degrading.
High (At the far right): Set this position when “MIU Live Viewer” requires many CPU resources. Screen refresh rate increases when “MIU Live Viewer” is used, but decreases the speed of other application speed.

2) MultiPC Mode
Select connected PC quantity from 1PC to 4PCs.

3) Cursor Emulation
Enabling this function “ON”, display cursor (pointer) prepared by this projector when cursor is not displayed on output screen. Take out check mark to make it “OFF” when PC and projector both cursors are displayed.

3.1 How to use “MIU Live Viewer” (Continued)

[JPEG tab]

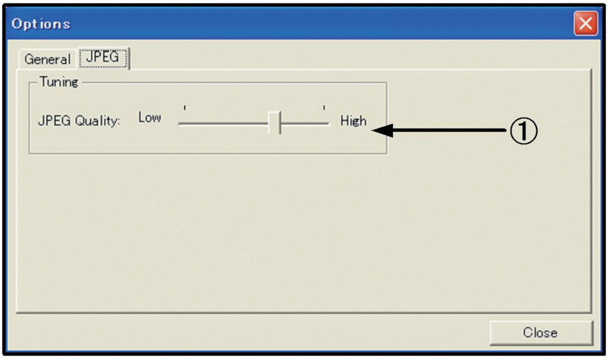


Fig. 3.1.3.c “Options”, “JPEG” tab

1) JPEG Quality

When “MIU Live Viewer” is used, it captures PC screen image. Then that is compressed as JPEG and sent to projector. By control bar in this tab, you can set compression rate.

Low (At the far left, Low picture quality): Make JEPG compression rate high. Screen refresh interval becomes shorter due to low volume transferred data, but picture quality decreases.

High (At the far right, High picture quality): Make JEPG compression rate low. Screen refresh interval becomes longer due to high volume transferred data, but picture quality increases.

[Icon in task tray]

To display “MIU Live Viewer” icon in task tray, click “Minimize” button in “MIU Live Viewer” window. The icon with yellow thunder mark shows that communication is connected, and it with red cross mark shows that it is disconnected. (Fig. 3.1.3.d shows while communication is disconnected.)

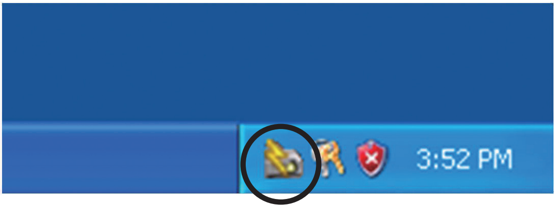


Fig. 3.1.3.d Icon in task tray

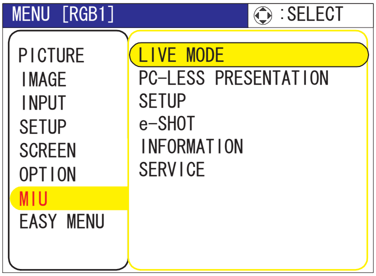
Double click “MIU Live Viewer” icon in task tray to display “MIU Live Viewer” window.

3.1.4 Utilize “MIU Live Viewer” – Basic -

This section explains basic of how to use “MIU Live Viewer” functions.

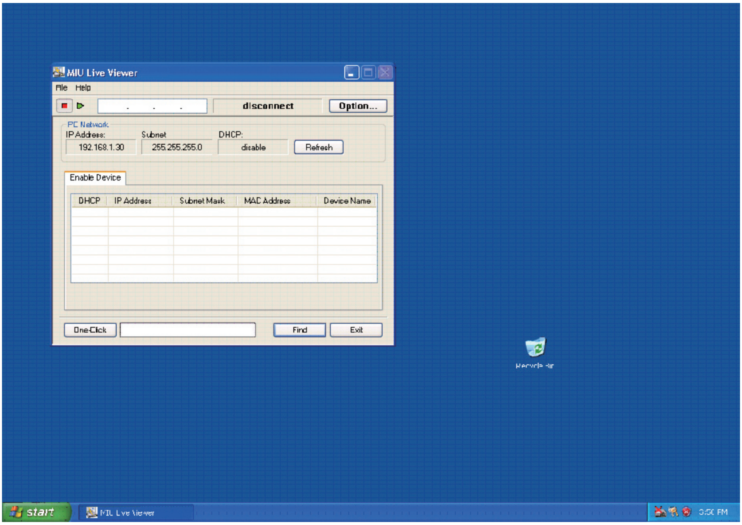
- Before start up the MIU Live Viewer, you have to set the projector into LIVE MODE by either of following way.

1) from Web Remote Control
    (1) Select LIVE MODE
2) from OSD Menu
    (1) Set the port into MIU menu by remote control or Keypad.
    (2) Open the OSD Menu by pressing ▲/◄/►/▼ Keypad button on the projector or Menu button on remote control.
    (3) Select the LIVE MODE in MIU Menu, and press the ► button on Keypad on the projector or Enter button on remote control.


MENU [RGB1]
:SELECT
PICTURE
IMAGE
INPUT
SETUP
SCREEN
OPTION
MIU
EASY MENU
LIVE MODE
PC-LESS PRESENTATION
SETUP
e-SHOT
INFORMATION
SERVICE

- After setting to the projector into LIVE MODE.

1) Start “MIU Live Viewer”. If “MIU Live Viewer” installation is not completed, install it referring to 3.1.1 Install “MIU Live Viewer”.


MIU Live Viewer
File
Help
disconnect
Option...
PC Network
Refresh
Enable Device
DHCP
IP Address
Subnet Mask
MAC Address
Device Name
One-Click
Find
Exit
Recycle Bin
start
MIU Live Viewer
3:50 PM

IP Address: 192.168.1.30
Subnet 255.255.255.0
DHCP: disable

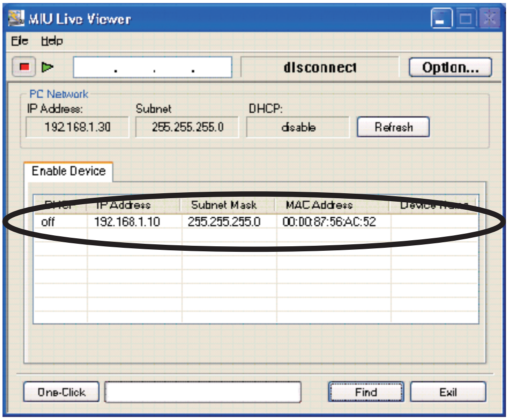
Fig. 3.1.4.a Screen after “MIU Live Viewer” starting up

3.1 How to use "MIU Live Viewer" (Continued)

2) Start Web Remote Control (refer to 2.6 Utilize Web Remote Control), and click "LIVE MODE" button on Web Remote Control to change projector mode to "MIU Live Viewer". After changing, screen of the output monitor connected with projector turn all blue.

3) Perform following operations on "MIU Live Viewer"
   (1) Click "Find" button to search communication available projector. If any projector is not found at "Enable Device" tab, try search again after referring section 2.2.

Display communication possible projector like this if available as a result of search.


MIU Live Viewer
File
Help
disconnect
Option...
PC Network
Refresh
Enable Device
One-Click
Find
Exit

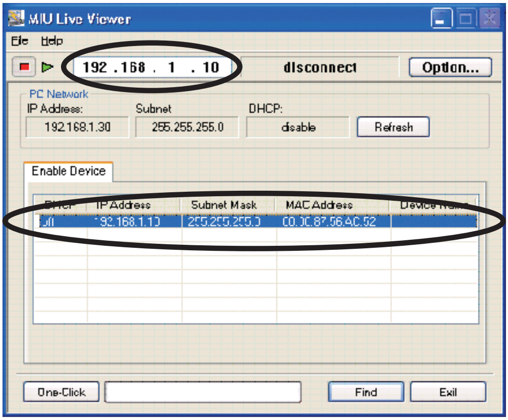
IP Address: 192.168.1.30
Subnet: 255.255.255.0
DHCP: disable

DHCP	IP Address	Subnet Mask	MAC Address	Device Name
off	192.168.1.10	255.255.255.0	00:00:87:56:AC:52	

Fig. 3.1.4.b. Projector research result display (1)

   (2) When communication available projector is found at 1), click the found projector to select

Click the projector line to connect. IP address appears in the upper column.


MIU Live Viewer
File
Help
disconnect
Option...
PC Network
Refresh
Enable Device
One-Click
Find
Exit

192 . 168 . 1 . 10

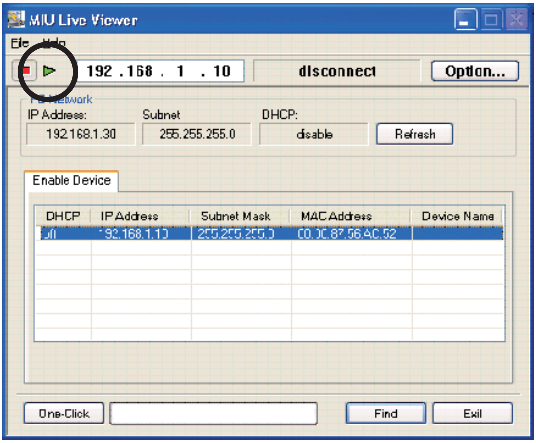
IP Address: 192.168.1.30
Subnet: 255.255.255.0
DHCP: disable

DHCP	IP Address	Subnet Mask	MAC Address	Device Name
off	192.168.1.10	255.255.255.0	00:00:87:56:AC:52	

Fig. 3.1.4.c Projector research result display (2)

3.1 How to use "MIU Live Viewer" (Continued)

(3) Click Capture start button.



192 . 168 . 1 . 10
disconnect

IP Address: 192.168.1.30
Subnet: 255.255.255.0
DHCP: disable

DHCP	IP Address	Subnet Mask	MAC Address	Device Name
off	192.168.1.10	255.255.255.0	00.0C.87.56.AC.52	

Fig. 3.1.4.d Start capturing

Based on the above operation, if captured picture of PC screen is displayed real time on monitor connected with projector, it is succeeded. Much easier to connect if you utilize "One-Click-Communication" function. (Refer to section 2.2.)
This is basic usage. Refer to section 4.1 for further explanation of advanced MIU Live Viewer usage.

3.2 Utilize "PC-LESS Presentation" – Basic -

Explain basics of how to utilize "PC-LESS Presentation".
1) Save JPEG picture files into root directory in SD card or USB Memory. Insert SD card into SD slot on projector or insert USB memory into AUX I/O slot on projector (📖***Inserting an SD card and USB memory of the User's Manual - Operating Guide***).
2) Connecting as network refer to section 3 and start the Web Remote Control.
3) Click "THUMBNAIL" button on the Web Remote Control to change projector mode to "PC-LESS Presentation". Then thumbnail appears.

To remove the SD card or USB memory,
4) Be sure to perform the REMOVE procedure using the SERVICE item in the MIU menu (📖***MIU Menu of the User's Manual - Operating Guide***). When an error dialog appears in the procedure, please re-perform the procedure after waiting for a while.
5) When you remove the SD wireless network card, be sure to turn the projector off.
6) Remove the SD card or USB Memory. For removing the SD card, remove the SD card slot cover before, and put the cover back after.

3.2 Utilize “PC-LESS Presentation” –Basic - (Continued)

If thumbnail appears by above operation, it is succeeded. (Fig.3.2.a) This is basic usage. There are varieties of usage for “PC-LESS Presentation”. Refer to section 4.2 for further detailed explanation.

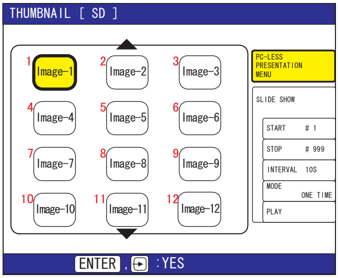
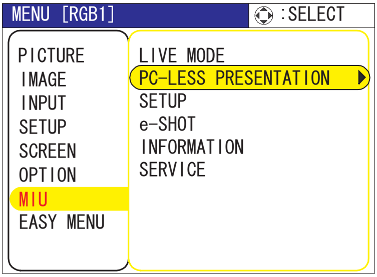
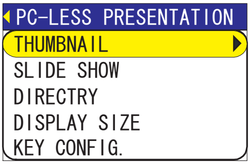

THUMBNAIL [SD]
1 Image–1
2 Image–2
3 Image–3
4 Image–4
5 Image–5
6 Image–6
7 Image–7
8 Image–8
9 Image–9
10 Image–10
11 Image–11
12 Image–12
PC-LESS PRESENTATION MENU
SLIDE SHOW
START # 1
STOP # 999
INTERVAL 10S
MODE ONE TIME
PLAY
ENTER , :YES

Fig. 3.2.a Thumbnail display

You can also activate “PC-LESS Presentation” from the OSD Menu.

1) Open the OSD Menu from the Menu button on the remote control or ▲/◄/►/▼ button on Keypad.
2) Select “PC-LESS Presentation” on the MIU Menu. And press the Enter button on the remote control or ► button on Keypad. Then PC-LESS PRESENTATION Menu appears.


MENU [RGB1]
:SELECT
PICTURE
IMAGE
INPUT
SETUP
SCREEN
OPTION
MIU
EASY MENU
LIVE MODE
PC–LESS PRESENTATION
SETUP
e–SHOT
INFORMATION
SERVICE


PC–LESS PRESENTATION
THUMBNAIL
SLIDE SHOW
DIRECTRY
DISPLAY SIZE
KEY CONFIG.

3) Select THUMBNAIL on PC-LESS PRESENTATION Menu. And press the Enter button on remote control or ► button on Keypad. Then thumbnail appears.

⚠**Caution** • Do not pull out memory card while file is accessed.
• SDHC(4GB etc) SD memory is not supported. UP to 2GB.
• Some SD memories and/or USB memories will not work correctly.
• Security USB memory is not supported.

4. Utilize projector – Advanced -

4.1. Utilize “MIU Live Viewer” – Advanced -

This section explains how to connect multiple PCs.

4.1.1. Connect multiple PCs with one projector (Multiple PCs connection)

A projector can be connected with up to 4 PCs to display multiple windows.

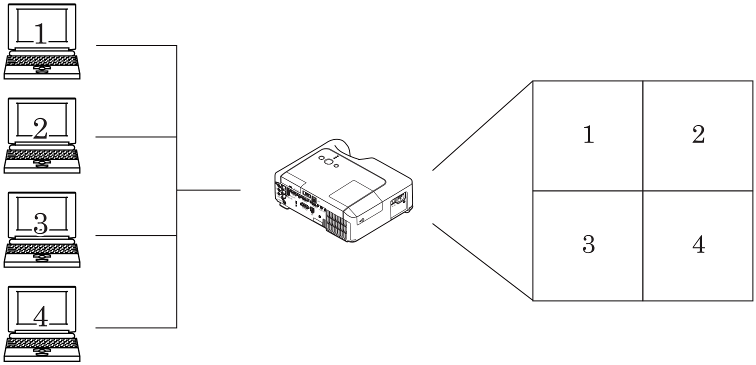


Fig. 4.1.1.a Multiple PCs connection outline

Followings are required for multiple PCs connection.

- From 2 to 4 PCs (“MIU Live Viewer” installation is required to all PCs to connect.)
- Projector: 1 unit
- Straight LAN cable: Required qty*
- Ethernet hub

* It is required to make all wireless PCs enabling wireless communication when doing multiple PCs connection as wireless LAN connection. SD-Link11g card for projector is required. If it is communicated by Infrastructure mode, access point is necessary. (📖*16*)

4.1. Utilize “MIU Live Viewer” – Advanced - (Continued)

[Connection]

1) Connect all PCs and projector using LAN cables and hub as shown in fig. 4.1.1.a. Connect projector and output monitor with RGB cable.
2) Start up “MIU Live Viewer” in each PC. Check the IP address in PCs and confirm xxx of [192.168.1.xxx] in IP address is set different value in each PC.
3) Click “Find” button in “MIU Live Viewer” and search projector.
4) When projector is found, click “Option” button in “MIU Live Viewer”. Then open “General” tub and select the number of PCs to connect as MultiPC Mode. After selecting, click “Close” button.
5) Click Capturing Start button.
6) Repeat from 3) to 5) to all PCs.

* Display screen priority
In case of multiple PCs connection, priority is decided automatically comparing when each PC is connected. In each mode, priority is as shown in fig. 4.1.1.b. (Smaller number is prioritized.)

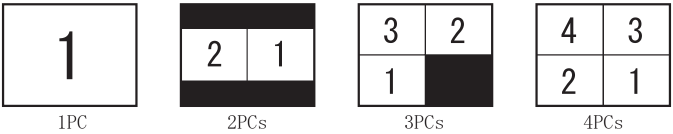


Fig. 4.1.1.b Priority in each mode

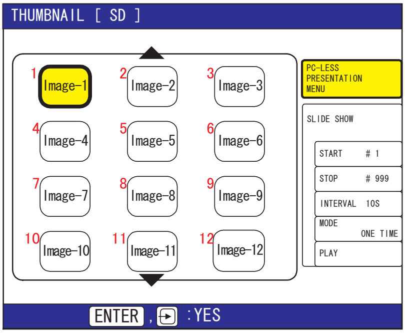
Detailed conditions and specifications for priority are as follows.
a) The priority is high the PC that connects later.
b) When Multi PC Mode (2 to 4 PCs) is changed to 1 PC, changed 1 PC has highest priority.
c) Multi PC Mode can be changed settings freely even the PC is communicating.
d) When the lower number than connected PCs is selected, lower priority PC screens are not displayed, but connections with projector are kept.
When more than 5 PCs are connected with projector, lower priority PC connection is disconnected.

NOTE • When Multi PC is selected, if the screen resolution on one of PCs is changed, the PC will be given the top priority, so the mode (1 to 4PCs) set on the PC will be effective on the projector.
• On Multi PC Mode, actual image resolution of each screen is 1/4 of the original, then small letters or lines might be hard to be illegible.
It is recommended to use letters as large as possible. Or try manual H.Phase adjustment which might improve image quality.

4.2 Utilize “PC-LESS Presentation” – Advanced -

“PC-LESS Presentation” reads image data from memory cards inserted into SD or USB slot and perform followings.
SD Memory and SD Wireless card can not be inserted at the same time.

- Thumbnail display (Section 4.2.1)
- Display in full screen (Section 4.2.2)
- Slide show (Section 4.2.3)
- Directory display (Section 4.2.4)

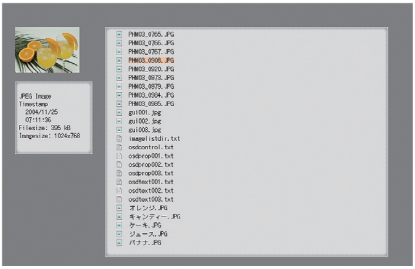

THUMBNAIL [SD]
1 Image–1
2 Image–2
3 Image–3
4 Image–4
5 Image–5
6 Image–6
7 Image–7
8 Image–8
9 Image–9
10 Image–10
11 Image–11
12 Image–12
PC-LESS PRESENTATION MENU
SLIDE SHOW
PLAY
ENTER , : YES

START # 1
STOP # 999
INTERVAL 10S
MODE ONE TIME

Fig. 4.2.a Thumbnail display

Fig. 4.2.b Display in full screen

Fig. 4.2.c Slide show



JPEG Image
Timestamp
2004/11/25
07:11:36
Filesize: 395 kB
Imagesize: 1024x768

```
PHM03_0765.JPG
PHM03_0766.JPG
PHM03_0767.JPG
PHM03_0908.JPG
PHM03_0920.JPG
PHM03_0973.JPG
PHM03_0979.JPG
PHM03_0984.JPG
PHM03_0985.JPG
gui001.jpg
gui002.jpg
gui003.jpg
imagelistdir.txt
osdcontrol.txt
osdprop001.txt
osdprop002.txt
osdprop003.txt
osdtext001.txt
osdtext002.txt
osdtext003.txt
オレンジ.JPG
キャンディー.JPG
ケーキ.JPG
ジュース.JPG
バナナ.JPG
```

Fig. 4.2.d Directory display

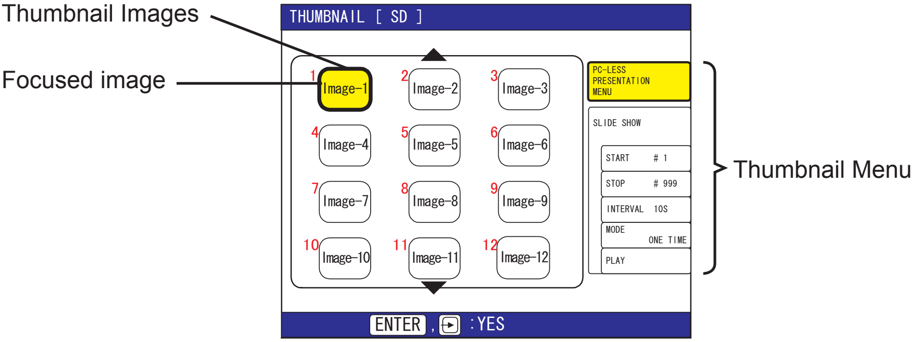
4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

Following picture and movie files can be displayed.

- JPEG (.jpeg, .jpg) * Progressive is not corresponded.
- BMP (.bmp)
- PNG (.png)
- MPEG4 (.mp4) * Supported bit resolution rate is less than 1Mbps in Simple Profile.
  Supported resolution is less than VGA.
  Supported Audio format is only AAC.

4.2.1 Thumbnail display

Fig.4.2.1 shows thumbnail display. Click [THUMBNAIL] button in the Web Remote Control to display menu on the screen in order to make thumbnail display.
You can also display thumbnail by remote control or keypad (📖***53***).


Thumbnail Images
Focused image
THUMBNAIL [SD]
1 Image–1
2 Image–2
3 Image–3
4 Image–4
5 Image–5
6 Image–6
7 Image–7
8 Image–8
9 Image–9
10 Image–10
11 Image–11
12 Image–12
PC-LESS PRESENTATION MENU
SLIDE SHOW
PLAY
ENTER , :YES
Thumbnail Menu

START # 1
STOP # 999
INTERVAL 10S
MODE ONE TIME

Fig. 4.2.1. Thumbnail display

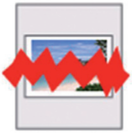
4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

Following operations can be accessible while thumbnail is displayed.

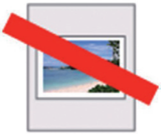
▲/◀/▶/▼ Remote control/Keypad	Move cursor.
PAGE UP PAGE DOWN Remote control	Switch pages.
ENTER Remote control INPUT Keypad	Display selected image in full screen.
MENU Remote control	Displays PC-LESS PRESENTATION Menu.

* These operations are not accessible while projector OSD menu is displayed.

NOTE • Thumbnail display shows 12 pictures in 1 page as maximum.
• It is not possible to change the input port by INPUT button when THUMBNAIL, SLIDE SHOW, or DIRECTORY is displayed.
• Displays the projector Menu before changing the input port .
• Select the right edge images and press the ► button, then thumbnail menu will be selected.
• Some error Icons will be displayed in thumbnail.



This file seems to be broken or not supported format.



This file exists only in Playlist (📖67), but does not exist anywhere.

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

4.2.2 Display in full screen

Full screen display (fig.4.2.2) shows a full display image on the PC. To make Full-screen display, click [MENU] button in the Web Remote Control menu on the screen. When select [PC-LESS Presentation], then [Thumbnail] from the menu, click [ENTER] so that moves to be full-screen display.

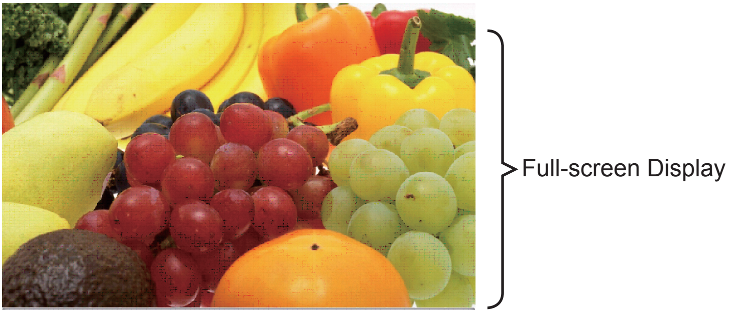


Fig.4.2.2 Full-screen Display

While displaying in full screen, following operation can be accessible from the Web Remote Control.

◀/▶ or ▲/▼ (Selected on KEY CONFIG. MENU 📖*60*)		• Rotate image 90 degrees clockwise or otherwise. Once image is rotated, it keeps the display image even though it is switched. (Thumbnail or slide show display) To return the original, rotating the image 360 degrees or erase play list in memory card. (Refer to section 4.3) • Moving the slide forward or backward.
ENTER INPUT	Remote control Keypad	Displaying thumbnail.
MENU	Remote control	Displays PC-LESS PRESENTATION Menu.

* These operations are not accessible while projector OSD menu is displayed.

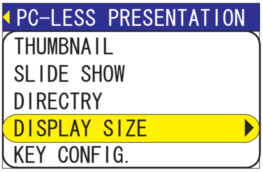
NOTE • It is not possible to change the input port by INPUT button of keypad when displaying the THUMBNAIL, SLIDE SHOW, or DIRECTORY.
• Displays the projector Menu before changing the input port.
• Image might not be displayed properly at the beginning or end of MP4 file playback.

4.2 Utilize "PC-LESS Presentation" – Advanced - (Continued)

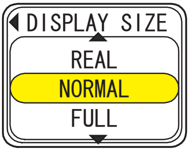
You can display the image file with your desired size.

1) Select the DISPLAY SIZE in PC-LESS PRESENTATION Menu.

2) Press the Enter button on the remote control or ► button on the Keypad.


PC-LESS PRESENTATION
THUMBNAIL
SLIDE SHOW
DIRECTRY
DISPLAY SIZE
KEY CONFIG.

3) Then DISPLAY SIZE menu appears.


DISPLAY SIZE
REAL
NORMAL
FULL

4) Select your desired DISPLAY SIZE.
- REAL : Displays the image at original size.
  Displays the image at the center of screen if original size is smaller than the screen size.
  Displays only center of the image if original size is larger than the screen size.
- NORMAL : Displays the image for the maximum size on the screen, and keeps original aspect.
- FULL : Displays the image at the full size screen.
  Original aspect will be changed to full size display.

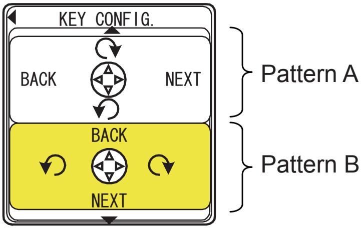
The animation file is always played at VGA mode if resolution is larger than VGA. The animation file is always played at the center of screen if resolution is smaller than VGA.

You can select the KEY configuration from 2 preset pattern assigned to ▲/▼/◄/► keys on Tumbnail or Directory mode.

1) Select the KEY CONFIG. in PC-LESS PRESENTATION Menu.

2) Press ► button.

3) The KEY CONFIG. menu appears.


KEY CONFIG.
BACK
NEXT
BACK
NEXT
Pattern A
Pattern B

4) Select the KEY CONFIG. pattern.
- pattern A : ◄ : rotation to left ► : rotation to right
  ▲ : previous image ▼ : next image
- pattern B : ◄ : previous image ► : next image
  ▲ : rotation to right ▼ : rotation to left

4.2 Utilize "PC-LESS Presentation" – Advanced - (Continued)

4.2.3. Slide show

Slide show (fig.4.2.3) displays a full screen image and move to the next interval. Click the "SLIDE SHOW" button in Web Remote Control, then Slide show will be played. Display time can be set by the Playlist (refer to section 4.3) and menu.

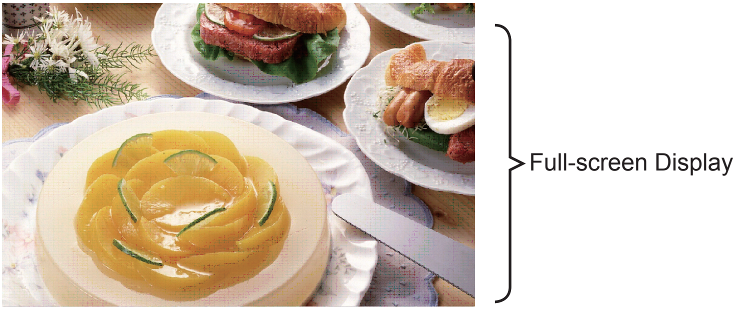


Fig. 4.2.3 Slide show

Following operations are accessible while slide show is displayed.

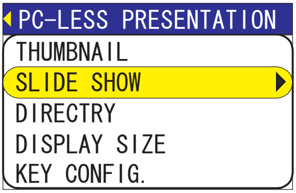
ENTER	Remote control	Display thumbnails.
INPUT	Keypad	
MENU	Remote control	Displays PC-LESS PRESENTATION Menu.

* These operations are not accessible while projector OSD menu is displayed.

NOTE • It is impossible to change the input port by INPUT button if THUMBNAIL, SLIDE SHOW, or DIRECTORY is displayed.
- Displays the projector Menu before changing the input port .
- Images can be displayed when it is recorded in the Playlist.
- Image can not be displayed in the thumbnail if it is not recorded in the Playlist. (📖67)
- The START #, STOP #, INTERVAL, and MODE are set by thumbnail menu once, this setting has more priority than the Playlist.
- If you would like to release the priority, delete the slidemode.txt file from directory.
- When SLIDE SHOW mode is set to ONE TIME, the last slide of the presentation will be held on screen till either of ENTER key the remote or INPUT key on the projector is pushed.

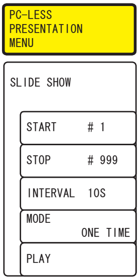
4.2 Utilize "PC-LESS Presentation" – Advanced - (Continued)

You can also play the Slide show with the projector Menu.
Select "SLIDE SHOW" on PC-LESS PRESENTATION Menu. And press the Enter button on the remote control or ► button on Keypad. Then Slide show will start.


PC-LESS PRESENTATION
THUMBNAIL
SLIDE SHOW
DIRECTRY
DISPLAY SIZE
KEY CONFIG.

You can play the Slide show at your desired configuration.
Configure the Slide Show items in THUMBNAIL.

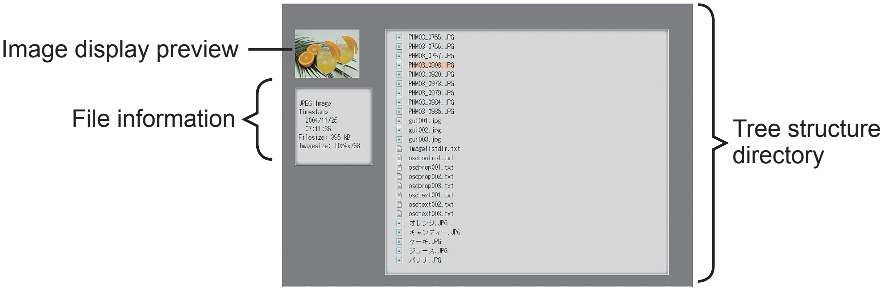
1) START # : Set the beginning number of Slide show.
2) STOP # : Set the end number of Slide show.
3) INTERVAL : Set the interval Slide show.
4) MODE : Select the Slide show mode.
ONE TIME : Play the Slide show one time.
ENDLESS : Play the Slide show endless.
5) PLAY : Play the Slide show.


PC-LESS PRESENTATION MENU
SLIDE SHOW
START # 1
STOP # 999
INTERVAL 10S
MODE ONE TIME
PLAY

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

4.2.4 Directory display

Directory display (Fig.4.2.4) shows saved directories and files including undisplayable files in the memory card on the tree structure. Click the “DIRECTORY” button in the Web Remote Control, then the directory tree will be displayed. While displaying directory, preview picture of selected file is shown on the top left. In case of moving picture, initial flame is displayed as preview. Nothing is displayed in case of directories or undisplayable files. Displayable file can be played if “ENTER” is clicked when its file is selected.
Select the directory and press the Enter button, then the files in the directory will be displayed in the thumbnail.



```
JPEG Image
Timestamp
  2004/11/25
  07:11:36
Filesize: 395 kB
Imagesize: 1024x768
```

```
PHM03_0765.JPG
PHM03_0766.JPG
PHM03_0767.JPG
PHM03_0908.JPG
PHM03_0920.JPG
PHM03_0973.JPG
PHM03_0979.JPG
PHM03_0984.JPG
PHM03_0985.JPG
gui001.jpg
gui002.jpg
gui003.jpg
imagelistdir.txt
osdcontrol.txt
osdprop001.txt
osdprop002.txt
osdprop003.txt
osdtext001.txt
osdtext002.txt
osdtext003.txt
オレンジ.JPG
キャンディー.JPG
ケーキ.JPG
ジュース.JPG
バナナ.JPG
```

Fig. 4.2.4 Directory display screen

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

Following operations can be accessible while directory is displayed.

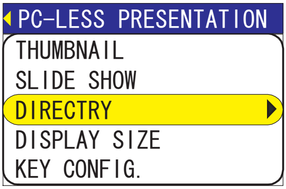
▲/▼	Moving selected item upward or downward.
►	Open the closed folder.
◄	Close the folder.
PAGE UP PAGE DOWN Remote control	Show undisplayed portion if the tree display is not fit inside the screen.
ENTER Remote control INPUT Keypad	Play displayable file. While directory is selected, thumbnail is displayed. It is not possible to play undisplayable file. Click “ENTER” while playing, so it returns to the directory display.
MENU Remote control	Displays the menu.

* These operations are not accessible while projector OSD menu is displayed.

NOTE • It is not possible to change the input port by INPUT button when THUMBNAIL, SLIDE SHOW, or DIRECTORY is displayed.
- Displays the projector Menu before changing the input port .
- Only alphanumeric characters can be used for directory name and file name.
- This directory display is able to show up to 10 layers. Over 10 layers of files and folders can not be shown. Some files and directories are not displayed if there are too many. In this case, delete some files in the directory or some directories in the memory card.

4.2 Utilize "PC-LESS Presentation" – Advanced - (Continued)

You can also display the directory with the projector Menu.
Select "DIRECTORY" in PC-LESS PRESENTATION Menu. And press the Enter button on remote control or ► button on Keypad. Then directory will be displayed.



[File information display]

File information display shows following information.

Displayable still image file
- File format (JPEG, PNG and BMP)
- Time stamp (When file is created)
- File size (Size of File)
- Image size (File resolution)

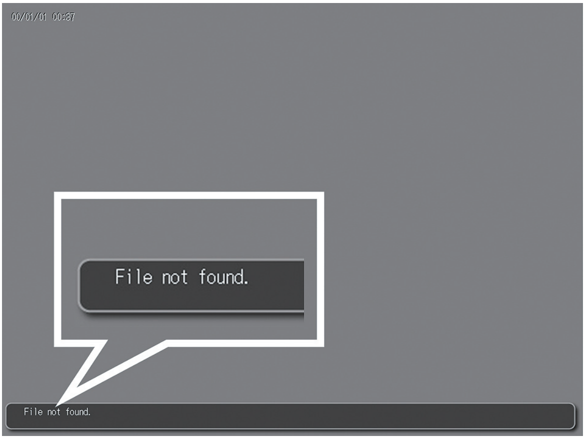
Displayable moving image file
- File format (MP4)
- Time stamp (When the file is created)
- File size (Size of File)
- Movie size (File resolution)
- Movie time (Play time)

Undisplayable file
- File format (Directory: Directory, Undisplayable file: File)
- Time stamp (When file is created)
- File size (Size of File)

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

4.2.5 “PC-LESS Presentation” error message

Error message is displayed at a specific condition while “PC-LESS Presentation” mode. It appears at the bottom and the gray area of screen.



File not found.

File not found.

Fig. 4.2.5 “PC-LESS Presentation” error message

“PC-LESS Presentation” error message list

Error message	Error content	Display mode
File not found	Displayable file does not exist.	Display in full screen and slide show
Illegal Playlist file	Play list file has malfunction. (Over 64kB file, over 1022 characters per line in file or linefeed code malfunction)	Display in full screen and slide show

4.3 Playlist

Playlist is a DOS format text file, which decides the order of displayed still image files or moving image files in the thumbnail or the slide show.
Playlist file name is [imagelistdir.txt]. It is created in each folder when "PC-LESS Presentation" is displayed. The timing of playlist creation is when "PC-LESS Presentation" is displayed in the directory, which any playlist file does not exist. The playlist is created in the displayed directory.

NOTE • Playlist can not be overwritten. Once it is created, data remains. Therefore, the image can not displayed if it is additionally saved to the memory card that is on the playlist. In order to see added picture file, delete playlist.

Playlist is editable on the PC. Display time and rotation information at the slide show can be set based on specifying settings. Of course it is possible to make certain file image undisplayable in a playlist deleting 1 line relating to the file from playlist. Also, it is possible to see added picture image based on adding picture image file name and pass name of destination to save in playlist.

[Example of adding image file] (Pass name/pass name/…/file name, display time, rotation information)

```
images/photo1/img001.jpg
images/photo1/img002.jpg, 2000
images/photo1/img003.jpg, 500, rot1
images/photo1/img004.jpg
images/photo1/img005.jpg, 500, rot2
```

The number after the extension is the slide show display time. It can be set between 0 and 999900. (ms) Least input increment is 100 ms. The end of display time means rotation information. 90 degrees clockwise rotation becomes rot1, rot2 and rot3. (When no rotation, not specify or specify rot0.)
Display time and rotation information should be used "," for separation.

⚠**Caution** • Maximum characters for the playlist in 1 line at playlist is 1024 including linefeed. If it exceeds, playlist becomes invalid and error.
• Playlist maximum size is 64kB. If it exceeds, it becomes invalid.
• Playlist can register up to 999 image files. If it exceeds, first 999 files can be utilized.
• When image file is added to the memory card and be able to see on the screen, delete existing playlist in the memory card.

4.4 Failure & Warning Alerts via E-mail

The projector can automatically send an alert to specified e-mail addresses when the projector requires maintenance or has encountered an error.

NOTE • Up to five e-mail addresses can be specified.
• The projector may be not able to send e-mail if the projector suddenly loses power.

Mail Settings (📖*26*)

To use the projector’s e-mail function please configure the following items via a web browser.
Example: If the IP address of the projector is set to 192.168.1.10/:

1) Enter **[http://192.168.1.10]** into the address bar of the web browser.
2) Enter the Administrator ID and Password and click **[Logon]**.
3) Click **[Port Settings]** on the main menu.
4) Click the **[Enable]** check box to open the SMTP Port.
5) Click the **[Apply]** button to save the settings.

NOTE • A Network Restart is required after the SMTP Port configuration settings have changed. Click **[Network Restart]** and configure the following items.

6) Click **[Mail Settings]** and configure each item. Refer to the **[Mail Settings]** item in **[Configuring and Controlling the Projector via a Web Browser]** for further information.
7) Click the **[Apply]** button to save the settings.

NOTE • Click the **[Send Test Mail]** button in **[Mail Settings]** to confirm that the e-mail settings are correct. The following mail will be delivered to the specified addresses.

Subject line : Test Mail <Projector name>
Text : Send Test Mail
Date <Testing date>
Time <Testing time>
IP Address <Projector IP address>
MAC Address <Projector MAC address>

Mail Settings (Continued)

8) Configure the Failure/Warning Alerts via E-mail settings. Click **[Alert Settings]** on the main menu.
9) Select and configure each alert item. Refer to **[Alert Settings]** in **[Configuring and Controlling the Projector via a Web Browser]** for further information.
10) Click the **[Apply]** button to save the settings.

Failure/Warning e-mails are formatted as follows:

Subject line	: <Mail title>	<Projector name>
Text	: <Mail text>	
	Date	<Failure/Warning date>
	Time	<Failure/Warning time>
	IP Address	<Projector IP address>
	MAC Address	<Projector MAC address>

4.5 Projector management via SNMP

When SNMP is enabled, the projector is able to send Failure/Warning Alerts to a specified PC.

NOTE • It is recommended that SNMP functions be carried out by a network administrator.
• SNMP management software must be installed on the computer to monitor the projector via SNMP.

SNMP settings (📖25)

Configure the following items via a web browser to use SNMP.
Example: If the IP address of the projector is set to 192.168.1.10/:

1) Enter **[http://192.168.1.10]** into the address bar of the web browser.
2) Enter the Administrator ID and Password and click **[Logon**].
3) Click **[Port Settings]** on the main menu.
4) Click the **[Enable]** check box to open the SNMP Port.
Set the IP address to send the SNMP Trap to when a Failure/Warning occurs.

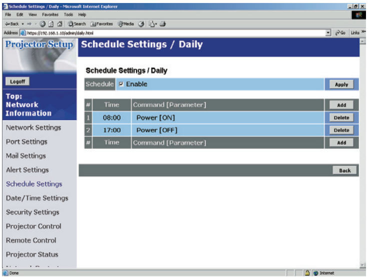
NOTE • A Network Restart is required after the SNMP Trap configuration settings have been changed. Click **[Network Restart]** and configure the following items.

5) Click **[Security Settings]** on the main menu.
6) Click **[SNMP]** and set the Community Name on the screen that is displayed.

NOTE • A Network Restart is required after the Community Name has been changed.
• Click **[Network Restart]** and configure the following items.

7) Configure the settings for Trap transmission of Failures/Warnings. Click **[Alert Settings]** on the main menu and select the Failure/Warning item to be configured.
8) Click the **[Enable]** check box to send out the SNMP trap for Failures/Warnings.
Clear the **[Enable]** check box when SNMP trap transmission is not required.
9) Click the **[Apply]** button to save the settings.

4.6 Controlling the Projector via Scheduling


Schedule Settings / Daily - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address https://192.168.1.10/admin/daily.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Apply
Add
Delete
Back
Done
Internet

Schedule Settings / Daily

Schedule Settings / Daily

Schedule ☑ Enable

#	Time	Command [Parameter]
1	08:00	Power [ON]
2	17:00	Power [OFF]

The projector can be automatically controlled via scheduling.

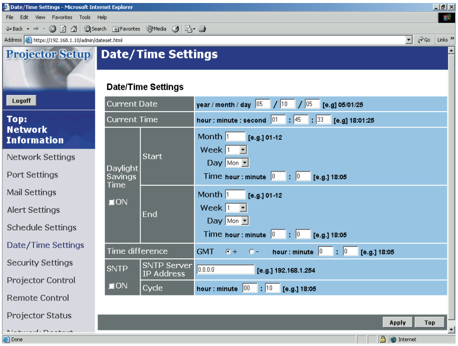
NOTE • You can schedule the following control events: Power ON/OFF, Input Source and Transferred Image Display.
• There are 3 types of Scheduling, 1) daily 2) day of the week 3) specific date.
• The priority for scheduled events is as follows 1) specific date 2) day of the week 3) daily.
• Up to five specific dates are available for scheduled events. Priority is given to those with the lower numbers when more than one event has been scheduled for the same date and time (e.g., 'Specific day No. 1' has priority over 'Specific day No. 2' and so on.
• Be sure to set the date and time before enabling scheduled events.

Date/Time Settings (📖34)

The Date/Time setting can be adjusted via a web browser.

Example: If the IP address of the projector is set to 192.168.1.10/:

1) Enter **[http://192.168.1.10]** into the address bar of the web browser. Enter the Administrator ID and Password and click **[Logon]**.
2) Click **[Date/Time Settings]** on the main menu and configure each item. Refer to the **[Date/Time Settings]** item in **[Configuring and Controlling the Projector via a Web Browser]** for further information.
3) Click the **[Apply]** button to save the settings.


Date/Time Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Apply
Top
Done
Internet

https://192.168.1.10/admin/dateset.html

Date/Time Settings

Date/Time Settings

Current Date		year / month / day 05 / 10 / 05 [e.g] 05/01/25
Current Time		hour : minute : second 01 : 45 : 33 [e.g] 18:01:25
Daylight Savings Time ☐ON	Start	Month 1 [e.g.] 01-12 Week 1 Day Mon Time hour : minute 0 : 0 [e.g.] 18:05
	End	Month 1 [e.g.] 01-12 Week 1 Day Mon Time hour : minute 0 : 0 [e.g.] 18:05
Time difference		GMT ● + ○ - hour : minute 0 : 0 [e.g.] 18:05
SNTP ☐ON	SNTP Server IP Address	0.0.0.0 [e.g.] 192.168.1.254
	Cycle	hour : minute 00 : 10 [e.g.] 18:05

NOTE • A Network Restart is required after the Daylight Savings Time or SNTP configuration settings have been changed.

• The battery for the built in clock may be dead if the clock loses time even when the DATE and TIME have been set correctly. Replace the battery by following the instructions on replacing the battery.
(📖*Internal clock battery of the User's Manual - Operating Guid*)

• The Internal Clock’s time may not remain accurate. Using SNTP is recommended to maintain accurate time.

Schedule Settings (📖32)

Schedule settings can be configured from a web browser.

Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **[http://192.168.1.10/]** into the address bar of the web browser.
2) Enter the Administrator ID and Password and click **[Logon]**.
3) Click **[Schedule Settings]** on the main menu and select the required schedule item. For example, if you want to perform the command every Sunday, please select the **[Sunday]**.
4) Click the **[Enable]** check box to enable scheduling.
5) Enter the Date (Month/Day) for specific date scheduling.
6) Click **[Add]** and set the time, command and parameters and click **[Add This Schedule]** when you want to add a command.
7) Click the **[Delete]** button when you want to delete a schedule.
8) Click the **[Apply]** button to save the settings.

There are three types of scheduling.
1) Daily: Perform the specified operation at a specified time every day.
2) Sunday ~ Saturday: Perform the specified operation at the specified time on a specified day of the week.
3) Specific Date: Perform the specified operation on the specified date and time.

NOTE • In Standby mode the power indicator will flash green for approx. 3 seconds when at least 1 “Power ON” schedule is saved.

• When the schedule function is used, the power cord must be connected to the projector and the outlet and the power switch must be turned on, [|]. The schedule function does not work when the power switch is turned off, [○] or the breaker in a room is tripped. The power indicator will lights orange or green when the projector gets is receiving the power.

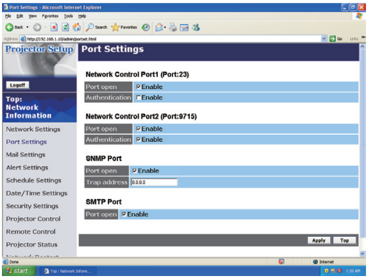
4.7 e-SHOT (Still Image Transfer) Display

The projector can display a still image that is transferred via the network.

e-SHOT transmission requires an exclusive application for your PC. You can download it from the Hitachi web site (http://hitachi.us/digitalmedia). Refer to the manual for the application for instructions.

Supported file types are JPG, BMP and PNG.

4.8 Command Control via the Network


Port Settings - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://192.168.1.10/admin/portset.html
Go Links
Projector Setup
Logoff
Top: Network Information
Network Settings
Port Settings
Mail Settings
Alert Settings
Schedule Settings
Date/Time Settings
Security Settings
Projector Control
Remote Control
Projector Status
Apply
Top
Done
Internet
start
Top : Network Inform...
1:20 AM

Port Settings

Network Control Port1 (Port:23)

Port open	☑ Enable
Authentication	☐ Enable

Network Control Port2 (Port:9715)

Port open	☑ Enable
Authentication	☑ Enable

SNMP Port

Port open	☑ Enable
Trap address	0.0.0.0

SMTP Port

Port open	☑ Enable

You can configure and control the projector via the network using RS-232C commands.

Communication Port

The following two ports are assigned for the command control.

TCP #23
TCP #9715

NOTE • Command control is not available via communication port (TCP #9716) that is used for the e-Shot transmission function.

Command Control Settings (📖25)

Configure the following items from a web browser when command control is used.
Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **[http://192.168.1.10/]** into the address bar of the web browser.
2) Enter the Administrator ID and Password and click **[Logon]**.
3) Click **[Port settings]** on the main menu.
4) Click the **[Enable]** check box to open **[Network Control Port (Port: 23)]** to use TCP #23. Click the **[Enable]** check box for the **[Authentication]** setting when authentication is required, otherwise clear the check box.
5) Click the **[Enable]** check box to open **[Network Control Port (Port: 9715)]** to use TCP #9715. Click the **[Enable]** check box for the **[Authentication]** setting when authentication is required, otherwise clear the check box.
6) Click the **[Apply]** button to save the settings.

Command Control Settings (Continued)

When the authentication setting is enabled, the following settings are required. (📖*36*)

7) Click **[Security Settings]** on the main menu.
8) Click **[Network Control]** and enter the desired authentication password. * See NOTE1.
9) Click the **[Apply]** button to save the settings. * See NOTE2.

NOTE1 • The Authentication Password will be the same for **[Network Control Port1 (Port: 23)]**, **[Network Control Port2 (Port: 9715)]**, and **[Image Transfer Port (Port: 9716)]**.

NOTE2 • The new configuration settings are activated after restarting the network. Restart the network when any configuration settings are changed. The network connection can be restarted using **[Network Restart]** on the main menu.

Command format

Command formats differ among the different communication ports.

TCP #23

You can use the RS-232C commands without any changes. The reply data format is the same as the RS-232C commands. However, the following reply will be sent back in the event of authentication failure when authentication is enabled.

<Reply in the event of an authentication error>

Reply	Error code	
0x1F	0x04	0x00

TCP #9715

Send Data format

The following formatting is added to the header (0x02), Data length (0x0D), Checksum (1byte) and Connection ID (1 byte) of the RS-232C commands.

Header	Data length	RS-232Ccommand	Checksum	Connection ID
0x02	0x0D	13 bytes	1 byte	1 byte

Header → 0x02, Fixed
Data length → RS-232C commands byte length (0x0D, Fixed)
RS-232C commands → RS-232C commands that start with 0xBE 0xEF (13 bytes)
Check Sum → This is the value to make zero on the addition of the lower 8 bits from the header to the checksum.
Connection ID → Random value from 0 to 255 (This value is attached to the reply data)

Reply Data format

The connection ID (the data is same as the connection ID data on the sending data format) is attached to the RS-232C commands reply data.

<ACK reply>

Reply	**Connection ID**
0x06	1 byte

<NAK reply>

Reply	**Connection ID**
0x15	1 byte

<Error reply>

Reply	**Error code**	**Connection ID**
0x1C	2 bytes	1 byte

<Data reply>

Reply	**Data**	**Connection ID**
0x1D	2 bytes	1 byte

<Projector busy reply>

Reply	**Status code**	**Connection ID**
0x1F	2 bytes	1 byte

<Authentication error reply>

Reply	**Authentication Error code**		**Connection ID**
0x1F	0x04	0x00	1 byte

Automatic Connection Break

The TCP connection will be automatically disconnected after there is no communication for 30 seconds after being established.

Authentication

The projector does not accept commands without authentication success when authentication is enabled. The projector uses a challenge response type authentication with an MD5 (Message Digest 5) algorithm.
When the projector is using a LAN, a random eight bytes will be returned if authentication is enabled. Bind this received 8 bytes and the authentication password and digest this data with the MD5 algorithm and add this in front of the commands to send.

Following is a sample if the authentication password is set to “password” and the random eight bytes are “a572f60c”.

1) Select the projector.
2) Receive the random eight bytes “a572f60c” from the projector.
3) Bind the random eight bytes “a572f60c” and the authentication password “password” and it becomes “a572f60cpassword”.
4) Digest this bind “a572f60cpassword” with MD5 algorithm.
   It will be “e3d97429adffa11bce1f7275813d4bde”.
5) Add this “e3d97429adffa11bce1f7275813d4bde” in front of the commands and send the data.
   Send “e3d97429adffa11bce1f7275813d4bde”+command.
6) When the sending data is correct, the command will be performed and the reply data will be returned. Otherwise, an authentication error will be returned.

5. Troubleshooting

Problem			Likely Cause	Things to Check	Reference Page Number
No image			The projector is not turned on.	Is the projector's lamp on?	*17
			The projector's input source isn't switched to MIU.	Is the projector switched to MIU?	*18
Wireless / Wired	Live Mode	The projector that you want to connect to is nowhere to be found on the list of available projectors	The PC and/or projector's network settings are not configured correctly.	Check both the PC and projector's network settings. If you change the projector's settings, turn off the projector's AC power and then turn it on again. If you simply put the projector in STANDBY power mode and then turn it on again, the new settings might not take effect.	8, 10, 16
			Weak radio signal	• Bring the PC and projector closer together • Radio waves won't go through concrete and metal (steel doors, etc.)	–
		Can't communicate	The Projector isn't in Live Mode	Check the mode on MIU Menu to make sure that it is in the correct mode.	50
		The projected image is rather slow compared to that of the PC	The projector isn't capable of relaying dynamic images such as PowerPoint® animation at full speed.	Try increasing the Capture Performance priority level. It may improve the speed a little.	48
			The compression rate being used for transferring the images is too low.	Try setting the image compression to "Low." The resolution will drop in quality, but it may help improve the speed.	48

(continued on next page)

Problem			Likely Cause	Things to Check	Reference Page Number
Wireless / Wired	Live Mode	Lots of interference in the images	The compression rate being used for transferring the images is too high.	Try setting the image compression to "High." • You may experience a drop in speed.	49
		Two cursors appear	Cursor of the PC and cursor of the projector are displayed coming in succession.	Turn off the cursor Emulation of MIU MIU Live Viewer option.	48
		No cursor appears	Some PCs do not display the cursor in MIU MIU Live Viewer.	Turn off the cursor Emulation of MIU MIU Live Viewer option.	48
PC LESS	No information is shown after mass storage device is set on Thumbnail or Directory mode.		The mode setting is not renewed after the device is set.	Select either Thumbnail mode or Directory mode again, showing PC LESS Presentation Menu.	53, 63
Wireless	Can't communicate		The wireless LAN card isn't inserted into the projector or the memory card is still inserted.	Insert the wireless LAN card that came with your projector into the module.	*12
			There is closely another projector or other that has the same wireless setting.	Try changing of SSID and IP Address.	24 *54
Wired LAN	Can't communicate		The PC and/or projector's network settings are not configured correctly.	Check both the PC and projector's network settings.	11-13
			The wireless LAN card is inserted into the projector.	Remove the wireless LAN SD card from the projector (you can't use both wireless and wired LAN connections at the same time).	*12
Others - Information from the projector to PC is not correct or completed - The projector does not respond - Image on screen is freezed			Communication between the projector and PC is not working well. MIU Functions of the projector is not working well.	Try "MIU RESTART" in MIU SERVICE MENU.	*58

* User's Manual - Operating Guide

6. Specifications

Item	Specifications
Product name	Liquid crystal projector
File format	JPEG, PNG, BMP and MPEG4
Control software	Dedicated PC application and Web browser
Corresponding protocol	TCP/IP, DHCP client and HTTP server
Firmware OS	μITORN4.0 compliance
Network	Wireless LAN (IEEE802.11g) (Ad-Hoc and Infrastructure modes) Ethernet (100Base-TX/10Base-T)
Security	WEP(64/128bit), WPA-PSK/PSK2(TKIP/AES), SSID
PC application operational environment	OS: Windows® XP Home Edition/ Professional Windows® 2000 Professional CPU: Pentium III 600MHz or more is suggested. Memory size: 64M bytes or mode, 128M bytes or more in case of XP Graphic I/F: DirectX 6.1 or later Video RAM: 4MB required (8MB recommended) HDD: 10MB CD-ROM drive Web browser: Internet Explorer 5.5 or later
SD card	SD card (Corresponding card is not confirmed yet.)
Wireless LAN card	C-guys SD-Link11g
USB	USB1.1 host mass storage class SBC/BOT type Following USB memories can be read/written. - USB memory type - Card reader type (Corresponding card is not confirmed yet.)

7. Warranty and After-sales service

If a problem occurs with the equipment, first refer to the “5. Troubleshooting” (📖***80***) section and run through the suggested checks. If this does not resolve the problem, contact your dealer or service company. They will tell you what warranty condition is applied.

Audio Visual Products

2900 Dukane Drive
St. Charles, Illinois 60174
www.dukcorp.com/av

Toll-free: 800-676-2487
Fax: 630-584-5156
e-mail: avsales@dukcorp.com

DUKANE